

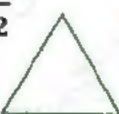
EL MOTAMYEZ - MATH QUESTIONS BANK

FINAL REVISION

Question 01











Choose the correct answer

- 1 The smallest like denominator of $\frac{5}{6}$ and $\frac{1}{3}$ is
 - a 18
 - b 6
 - c 3
 - d 2
- 2 The simplest form of form of $\frac{6}{12}$ is
 - a $\frac{1}{2}$
 - b $\frac{2}{3}$
 - c $\frac{5}{6}$
 - d $\frac{12}{6}$
- 3 Estimate the sum of $\frac{1}{6} + \frac{7}{8}$ using benchmarks,
 - a $\frac{25}{24}$
 - b 1
 - c $\frac{1}{2}$
 - d 0
- 4 $\frac{2}{6} \times 3 = \dots\dots\dots$
 - a $\frac{5}{6}$
 - b 1
 - c 36
 - d $\frac{12}{3}$
- 5 $3\frac{2}{5} \times 5 = \dots\dots\dots$
 - a $\frac{17}{5}$
 - b 5
 - c 17
 - d $3\frac{10}{5}$
- 6 It is impossible to draw a triangle with two Angles .
 - a Acute
 - b Obtuse
 - c right
 - d both b and c
- 7 the measure of an acute angle may be °
 - a 0°
 - b 40°
 - c 90°
 - d 170°
- 8 $\frac{4}{11} \times \dots\dots\dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$
 - a $\frac{14}{11}$
 - b $3\frac{1}{2}$
 - c 4
 - d $\frac{6}{11}$
- 9 $\frac{8}{15} \times b = \frac{8}{15} + \frac{8}{15} + \frac{4}{15}$, then b =
 - a $\frac{20}{15}$
 - b $3\frac{1}{2}$
 - c 3
 - d 2.5
- 10 $7\frac{3}{4}$ hours = hours + minutes
 - a 7 , 30
 - b $7, \frac{1}{2}$
 - c 7 , 15
 - d 7 , 45
- 11 the opposite triangle is






 - a right
 - b Obtuse
 - c acute
 - d otherwise



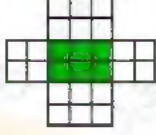
- 12  $\frac{4}{9} \times 0.5 = \dots\dots\dots$
 (a) $\frac{8}{9}$ (b) $\frac{20}{9}$ (c) 20 (d) $\frac{2}{9}$
- 13  $\frac{8}{15} \times 0.25 = \dots\dots\dots$
 (a) $\frac{1}{4}$ (b) $\frac{25}{15}$ (c) 24 (d) $\frac{2}{15}$
- 14  It is impossible to draw a triangle with one Angles .
 (a) Acute (b) Obtuse (c) right (d) both b and c
- 15 Volume of  is Cube units .
 (a) 3 (b) 4 (c) 5 (d) 10
- 16 the solid which has 5 vertices and 8 edges is
 (a) Cone (b) Cube (c) cuboid (d) Pyramid
- 17  the measure of an acute angle the measure of an obtuse angle
 (a) < (b) > (c) = (d) otherwise
- 18  $8 \div e = 40$, then $e = \dots\dots\dots$
 (a) 40 (b) $\frac{9}{40}$ (c) 5 (d) $\frac{1}{5}$
- 19 $\frac{8}{9} + \frac{2}{6}$ is about $1\frac{1}{2}$, the estimation is
 (a) overestimate (b) underestimate
- 20 $\frac{7}{9} - \frac{3}{9} = \dots\dots\dots$
 (a) $\frac{4}{9}$ (b) $\frac{5}{0}$ (c) 1 (d) $\frac{10}{9}$
- 21  $m(\angle A) = 40^\circ$, $m(\angle B) = 70^\circ$, $m(\angle C) = 70^\circ$, then it is atriangle .
 (a) right (b) Obtuse (c) acute (d) otherwise
- 22  $3\frac{2}{6} \times \frac{\dots}{6} = 3\frac{2}{6}$
 (a) $\frac{6}{6}$ (b) $3\frac{2}{6}$ (c) 6 (d) $\frac{1}{3}$
- 23  $\frac{6}{6} \times 2 = \dots\dots\dots$
 (a) $\frac{6}{6}$ (b) $2\frac{1}{6}$ (c) 2 (d) $\frac{5}{2}$
- 24 $3\frac{1}{2}$ hours = hours + minutes
 (a) 3 , 30 (b) 3 , $\frac{1}{2}$ (c) 3 (d) 4 , 2
- 25  $\frac{1}{5} \div 7 = \dots\dots\dots$
 (a) 1 (b) $\frac{1}{35}$ (c) 35 (d) $\frac{5}{7}$











26.  the opposite triangle is
 a scalene b Equilateral c isosceles d otherwise
27. Data can be represented by
 a Line plot b Pie graph c pictograph d All of them
28.  Triangle has 2 acute angles and 1 right angle .
 a right b Obtuse c right d otherwise
29.  the measure of an obtuse angle is 90°
 a $<$ b $>$ c $=$ d otherwise
30. the number of horizontal layer is
 a 3 b 4 c 5 d 10
31. the cube has Faces .
 a 12 b 6 c 0 d 8
32. 18 months = Year
 a $\frac{18}{12}$ b $3\frac{1}{6}$ c 3 d All of them
33. the simplest form of $4\frac{2}{10}$ is
 a $4\frac{3}{4}$ b $4\frac{1}{5}$ c $\frac{42}{10}$ d $2\frac{3}{4}$
34. $\frac{25}{8}$ is equivalent to
 a $2\frac{1}{8}$ b $3\frac{1}{25}$ c $3\frac{1}{8}$ d $\frac{8}{25}$
35. $3\frac{5}{6}$ is equivalent to
 a $2\frac{5}{6}$ b $4\frac{1}{25}$ c $3\frac{1}{6}$ d $\frac{23}{6}$
36. $3\frac{2}{6}$ is equivalent to
 a $2\frac{8}{6}$ b $3\frac{1}{6}$ c $2\frac{2}{6}$ d $\frac{23}{6}$
37. $8\frac{8}{8}$ is equivalent to
 a $9\frac{5}{6}$ b $8\frac{1}{8}$ c 81 d 9
38. $4\frac{2}{10}$ is equivalent to
 a $4\frac{20}{100}$ b $4\frac{1}{5}$ c $\frac{42}{10}$ d All of them



- 39 $m(\angle A) = 90^\circ$, $m(\angle B) = 60^\circ$, $m(\angle C) = 30^\circ$, then it is atriangle .
 (a) right (b) Obtuse (c) acute (d) otherwise
- 40 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3\frac{1}{5} - \dots\dots\dots$
 (a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$
- 41 the volume of this solid is Cube units .

 (a) 12 (b) 3 (c) 2 (d) 9
- 42 Triangle has 2 acute angles and 1 obtuse angle .
 (a) right (b) Obtuse (c) right (d) otherwise
- 43 the measure of a right angle is°
 (a) 0° (b) 40° (c) 90° (d) 180°
- 44 $\frac{4}{6} \times \frac{4}{9} \times \frac{3}{16} = \dots\dots\dots$
 (a) $\frac{124}{186}$ (b) $2\frac{2}{16}$ (c) 3 (d) $\frac{1}{18}$
- 45 $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \dots\dots\dots = \frac{1}{4}$
 (a) 4 (b) 2 (c) 3 (d) 1
- 46 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3 + \frac{1}{5} - \dots\dots\dots$
 (a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$
- 47 $\frac{8}{7} \times 3 = 4 \times \frac{\dots\dots\dots}{7}$
 (a) 8 (b) 4 (c) 3 (d) 6
- 48 $\frac{16}{9} \times \frac{3}{4} \dots\dots\dots \frac{2}{6} \times \frac{3}{8}$
 (a) < (b) > (c) = (d) otherwise
- 49 $m(\angle G) = 110^\circ$, $m(\angle D) = 35^\circ$, $m(\angle F) = 35^\circ$, then it is antriangle
 (a) right (b) Obtuse (c) acute (d) otherwise
- 50 $4\frac{2}{3} + 3\frac{9}{10}$ is estimated as
 (a) $4\frac{1}{2} + 4$ (b) $1 + \frac{1}{2}$ (c) $4 + \frac{1}{2}$ (d) $31 + 4\frac{1}{2}$
- 51 Length x width x height =
 (a) Area (b) Perimeter (c) volume (d) Base area



- 52 $m - \frac{5}{7} = \frac{1}{4}$, then the value of m is
 (a) $\frac{27}{28}$ (b) $\frac{13}{28}$ (c) $\frac{1}{4}$ (d) $\frac{5}{7}$
- 53 $\frac{7}{14} + e = 1$, then the value of e is
 (a) $\frac{8}{14}$ (b) $\frac{1}{2}$ (c) $\frac{5}{14}$ (d) $\frac{5}{7}$
- 54 $\frac{11}{16} - a = \frac{1}{4}$, then the value of a is
 (a) $\frac{8}{16}$ (b) $\frac{7}{16}$ (c) $\frac{10}{12}$ (d) $\frac{6}{6}$
- 55 $\frac{12}{20}$ is equivalent to
 (a) $\frac{8}{10}$ (b) $\frac{3}{5}$ (c) $\frac{10}{12}$ (d) $\frac{6}{5}$
- 56 $4 \frac{1}{12}$ years = years + months
 (a) 4 , 2 (b) $4 \frac{1}{12}$ (c) 4 , 1 (d) 4 , 12
- 57  Triangle has 3 acute angles and 0 obtuse angle .
 (a) right (b) Obtuse (c) acute (d) otherwise
- 58  the measure of an obtuse angle may be °
 (a) 0° (b) 40° (c) 90° (d) 110°
- 59  $\frac{3}{4} - \frac{3}{8}$ $\frac{7}{25} \times \frac{5}{21}$
 (a) < (b) > (c) = (d) otherwise
- 60  $2 \frac{2}{6} \times \frac{3}{7} =$
 (a) $\frac{14}{21}$ (b) $3 \frac{1}{2}$ (c) 1 (d) $\frac{14}{6}$
- 61  $AB = BC = 6.32$ cm , AC is less than them , then it is antriangle .
 (a) scalene (b) Equilateral (c) isosceles (d) otherwise
- 62 the volume of this solid is Cubes. 
 (a) 3 (b) 4 (c) 5 (d) 10
- 63 the sum of the measures of angles around at a point is equal°
 (a) 270 (b) 90 (c) 360 (d) 180
- 64 $5 \frac{2}{8} + 3 \frac{6}{8} =$
 (a) 9 (b) $8 \frac{1}{6}$ (c) $8 \frac{4}{6}$ (d) $\frac{4}{6}$



65 $6\frac{1}{5} - 2\frac{3}{5} = \dots\dots\dots$

a $4\frac{4}{5}$

b $4\frac{2}{5}$

c $3\frac{3}{5}$

d $\frac{31}{5}$

66 $3\frac{1}{8} + 2\frac{3}{8} = \dots\dots\dots$

a $5\frac{4}{5}$

b $5\frac{1}{2}$

c $1\frac{4}{8}$

d $1\frac{2}{8}$

67 $9\frac{3}{9} - 3\frac{1}{3} = \dots\dots\dots$

a $6\frac{2}{3}$

b $6\frac{7}{9}$

c $6\frac{1}{9}$

d 6

68 $3\frac{2}{3} \times \frac{1}{5} = \frac{1}{5} \times 3 + \frac{1}{5} \times \dots\dots\dots$

a $\frac{2}{3}$

b $3\frac{2}{3}$

c 3

d $\frac{8}{3}$

69 45 minutes = Hours

a $\frac{1}{2}$

b $\frac{1}{4}$

c 1

d $\frac{3}{4}$

70 base area x height =

a Area

b Perimeter

c volume

d Base area

71 Triangle has 3 different sides .

a scalene

b Equilateral

c isosceles

d otherwise

72 A is bounded by an arc and two radii .

a Height

b Pie graph

c sector

d Bar graph

73 the colored part represent Of the circle .

a $\frac{1}{4}$

b 0.5

c $\frac{3}{4}$

d 0.25

74 75 minutes = Hours

a $\frac{1}{2}$

b $1\frac{1}{4}$

c 1

d $\frac{3}{4}$

75 Which is equal to $6 \times \frac{3}{9}$

a 2

b $3 \times \frac{6}{9}$

c $18 \times \frac{1}{9}$

d all of them

76 $5 + \frac{3}{5} + \frac{2}{5} = \dots\dots\dots$




a $5\frac{2}{5}$

b 6

c $\frac{18}{4}$

d 4



- 77 $\frac{2}{3} + \frac{7}{12} = 1 + \dots\dots\dots$
 (a) $\frac{2}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$
- 78 $\frac{1}{4} + \frac{3}{12} = 1 - \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$
- 79  $3 \frac{3}{4} = \dots\dots\dots \div 4$
 (a) 12 (b) 4 (c) 3 (d) 15
- 80  $\dots\dots\dots = 13 \div 5$
 (a) 2 (b) 5 (c) $2 \frac{3}{5}$ (d) 18
- 81 $\frac{1}{2}$ year = $\dots\dots\dots$ Months
 (a) 5 (b) 6 (c) 2 (d) 1
- 82 $8 \frac{1}{9} + 3 \frac{5}{12}$ is estimated as $\dots\dots\dots$
 (a) $8 \frac{1}{2} + 3$ (b) $8 + 3 \frac{1}{2}$ (c) $0 + \frac{1}{2}$ (d) $8 \frac{1}{2} + 3.5$
- 83 $8 \frac{1}{6} + 3.5 = \dots\dots\dots$
 (a) $11 \frac{2}{3}$ (b) $11 \frac{1}{6}$ (c) $4 \frac{2}{3}$ (d) 5
- 84 volume \div height = $\dots\dots\dots$
 (a) Height (b) Width (c) volume (d) Base area
- 85  $\dots\dots\dots$ Triangle has 2 same sides and 1 different .
 (a) scalene (b) Equilateral (c) isosceles (d) otherwise
- 86 $4 \frac{3}{7} + \dots\dots\dots = 5 \frac{1}{3}$
 (a) $9 \frac{4}{21}$ (b) $1 \frac{16}{21}$ (c) 1 (d) $\frac{19}{21}$
- 87 $m - 7 \frac{2}{12} = 3 \frac{1}{4}$, then the value of m is $\dots\dots\dots$
 (a) $10 \frac{5}{12}$ (b) $3 \frac{11}{12}$ (c) 4 (d) $4 \frac{1}{8}$
- 88 $a + 6 \frac{4}{12} = 9 \frac{3}{4}$, then the value of a is $\dots\dots\dots$
 (a) $3 \frac{5}{12}$ (b) $15 \frac{7}{12}$ (c) 2.5 (d) $16 \frac{1}{12}$
- 89 $5 \frac{1}{5} - e = 3 \frac{1}{5}$, then the value of e is $\dots\dots\dots$
 (a) $2 \frac{2}{5}$ (b) $1 \frac{3}{5}$ (c) $1 \frac{4}{5}$ (d) $8 \frac{4}{5}$



- 90 volume \div (length \times width) =
 (a) Height (b) Width (c) volume (d) Base area
- 91 $24 \div 7 = \dots\dots\dots + 3$
 (a) $\frac{3}{3}$ (b) $\frac{1}{8}$ (c) 3 (d) $\frac{3}{7}$
- 92 $25 \div \dots\dots\dots = 6 \frac{1}{4}$
 (a) 6 (b) $\frac{1}{4}$ (c) 4 (d) $\frac{6}{25}$
- 93 $\frac{2}{3} + \frac{7}{12}$ is estimated as
 (a) $\frac{1}{2} + \frac{1}{2}$ (b) $\frac{1}{2} + 1$ (c) $0 + \frac{1}{2}$ (d) $1 + 1$
- 94 $\frac{8}{9} + \frac{1}{100}$ is estimated as
 (a) $\frac{1}{2} + \frac{1}{2}$ (b) $\frac{1}{2} + 1$ (c) $0 + \frac{1}{2}$ (d) $1 + 0$
- 95 $2 - \frac{2}{5} - \frac{1}{5} = \dots\dots\dots$
 (a) $1 \frac{2}{5}$ (b) $\frac{2}{5}$ (c) $\frac{2}{3}$ (d) 1
- 96 $7 \frac{m}{10}$ is slightly greater than $7 \frac{1}{2}$, then m can be
 (a) 11 (b) 5 (c) 6 (d) 1
- 97 volume \div (length \times height) =
 (a) Height (b) Width (c) volume (d) Base area
- 98 the measure of this central angle is°
 (a) 360 (b) 270 (c) 90 (d) 180
- 99 $\frac{1}{8} + \frac{6}{5}$ is about 1, the estimation is
 (a) overestimate (b) underestimate
- 100 the measure of an obtuse angle the measure of a right angle
 (a) < (b) > (c) = (d) otherwise
- 101 $\frac{1}{6}$ year = Months
 (a) 5 (b) 6 (c) 2 (d) 1
- 102 the angle whose vertex is the center of the circle is calledangle .
 (a) Central (b) Circular (c) right (d) Straight
- 103 $\frac{2}{8} + \frac{6}{8} = \dots\dots\dots$
 (a) $\frac{4}{6}$ (b) $\frac{2}{3}$ (c) 1 (d) $\frac{6}{8}$



- 104 $3\frac{12}{c}$ is slightly greater than 4 , then c can be
 (a) 11 (b) 9 (c) 13 (d) 12
- 105 If the volume of a cuboid = 30 cm^3 and base area = 15 cm^2 , then it's height is Cm
 (a) 5 (b) 2 (c) 15 (d) 150
- 106 $4 \div \frac{1}{4}$ $\frac{1}{4} \div 4$
 (a) < (b) > (c) = (d) otherwise
- 107 $\frac{1}{5}$ hour = Minutes
 12 (b) 7 (c) 5 (d) 1
- 108 $\frac{5}{9} + \frac{4}{7}$ is about 1 , the estimation is
 (a) overestimate (b) underestimate
- 109 $\frac{1}{\dots? \dots} = \frac{8}{24}$
 (a) 0 (b) 2 (c) 3 (d) 1
- 110 $\frac{1}{4} + \frac{3}{16} = \dots\dots\dots$
 (a) $\frac{7}{16}$ (b) 0 (c) 16 (d) $\frac{4}{20}$
- 111 $1\frac{1}{8}$ day = hours
 (a) 24 (b) 8 (c) 27 (d) 2
- 112 $\dots\dots\dots \div \frac{1}{6} = 24$
 (a) 4 (b) $\frac{1}{4}$ (c) 36 (d) $\frac{6}{24}$
- 113 $\frac{1}{8} \div m = \frac{1}{32}$, then m=
 (a) 4 (b) $\frac{1}{4}$ (c) 32 (d) $\frac{8}{32}$
- 114 A is a circle divided into sectors .
 (a) Height (b) Pie graph (c) sector (d) Bar graph
- 115 the measure of an acute angle the measure of a right angle
 (a) < (b) > (c) = (d) otherwise
- 116 Estimate the difference of $\frac{9}{11} - \frac{2}{5}$ using benchmarks,
 (a) $\frac{7}{6}$ (b) $\frac{1}{2}$ (c) 0 (d) 1



- 117 The LCM of denominators of $\frac{4}{7}$ and $\frac{2}{5}$ is
- (a) 7 (b) 35 (c) 5 (d) $\frac{6}{35}$
- 118 90 minutes = hours
- (a) $12\frac{1}{2}$ (b) $3\frac{1}{2}$ (c) 30 (d) $1\frac{1}{2}$
- 119 $\frac{1}{4} \div \frac{1}{2} = \dots\dots\dots$
- (a) 4 (b) $\frac{1}{4}$ (c) 8 (d) $\frac{1}{2}$
- 120 $10 \div \frac{1}{5} = \dots\dots\dots$
- (a) 2 (b) $\frac{1}{5}$ (c) 50 (d) $\frac{5}{10}$
- 121 $1 - \frac{3}{5} - \frac{2}{5} = \dots\dots\dots$
- (a) 0 (b) 2 (c) $\frac{5}{5}$ (d) 1
- 122 $\frac{2}{5} = \frac{\dots}{15}$
- (a) 0 (b) 2 (c) 3 (d) 6
- 123 $\frac{1}{\dots?} = \frac{12}{24}$
- (a) 0 (b) 2 (c) 3 (d) 1
- 124 $8 \div \frac{1}{4} \dots\dots\dots 4 \div \frac{1}{8}$
- (a) < (b) > (c) = (d) otherwise
- 125 $\frac{1}{5} + \frac{2}{3} = \dots\dots\dots$
- (a) $\frac{13}{15}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$
- 126 $\dots\dots\dots + \frac{5}{8} = 1$
- (a) $\frac{4}{8}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$
- 127 $\dots\dots\dots + \frac{5}{10} = 1$
- (a) $\frac{1}{2}$ (b) $\frac{5}{10}$ (c) $\frac{4}{8}$ (d) all of them
- 128 $1 - \dots\dots\dots = 0$
- (a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{2}{3}$ (d) 0
- 129 $1 - \dots\dots\dots = 1$
- (a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{0}{3}$ (d) 1



Question 02

complete

1 the number of vertical layer is



2 $\frac{3}{12} \times \frac{3}{8} \times \frac{2}{6} = \dots\dots\dots$

3 scalene triangle has 3 sides .

4 $4\frac{4}{8} \times \frac{\dots\dots}{8} = 4\frac{1}{2}$

5 $\frac{2}{8} \times 3 \times \frac{2}{6} = \dots\dots\dots$

6 $\frac{100}{100} \times 5\frac{6}{12} = \dots\dots\dots$

7 $3\frac{2}{5} \times 5 = 5 \times \dots\dots\dots$

8 $\frac{2}{5} \times 3 = 6 \times \dots\dots\dots$

9 $\frac{3}{2} \times \frac{12}{24} = \dots\dots\dots$

10 the figure name is

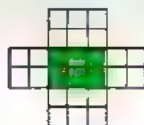


11 $\frac{2}{11} \times \dots\dots\dots = \frac{3}{11}$

12 $\dots\dots\dots \times \frac{3}{8} \times \frac{2}{6} = \frac{3}{8}$

13 $\frac{2}{3} \times \dots\dots\dots = \frac{6}{12}$

14 Volume =x.....x.....



15 $\dots\dots\dots \times \frac{5}{6} = \frac{10}{24}$

16 Triangle has 3 acute angles and 0 right angle .

17 $\frac{3}{5} \times 1.5 \times 30 = \dots\dots\dots$

18 if the volume = 1200 cm³ , then the missing dimension iscm



19 $\frac{4}{11} \times \dots\dots\dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

20 $3\frac{3}{5} \times \dots\dots\dots = 1$



21 $3 \frac{2}{3} \times \frac{1}{5} = \dots \times 3 + \dots \times \frac{2}{3}$

22 15 minutes = Hours

23 minutes = $\frac{1}{2}$ Hours

24 $2 \div 4 = \dots$

25 $23 \div 4 = \dots$

26 $34 \div 5 = 6 + \dots$

27 $40 \div \dots = 4 \frac{4}{9}$

28 $18 \div \frac{1}{2} = 18 \times \dots$

29 the measure of this central angle is°



30 $\frac{4}{11} \times \dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{4}{11}$

31 $d \div \frac{1}{5} = \frac{1}{2}$, then $d = \dots$

32 $\frac{1}{7} \div n = \frac{1}{21}$, then $n = \dots$

33 $6 \div f = 24$, then $f = \dots$

34 Any triangle has at least Acute angles .

35 Volume of  is Cube units .

36 Triangle has 3 acute angles .

37 $\frac{1}{6} + \frac{3}{6} = \dots$ In simplest form

38 color $\frac{1}{4}$ of the circle .



39 the measure of a right angle is 90°











40 the sum of all decimals in one circle =

41 the measure of an obtuse angle is 90°

42 the triangle hassides andangles

43 The simplest form of form of $\frac{2}{24}$ is



- 44  the Area of the opposite figure is square units 
- 45 the sphere has vertex .
- 46  the measure of an acute angle is 90°
- 47  $\frac{2}{6} \times 2.5 = \dots\dots\dots$
- 48 is a flat surface of a solid figure .
- 49  $\frac{5}{8} \times 0.4 = \dots\dots\dots$
- 50  Triangle has 3 equal sides .
- 51 volume \div base area =
- 52 volume \div (width \times height) =
- 53 $\frac{2}{3}$ year = Months
- 54 If the volume of a cuboid = 400 cm^3 , it's length = 10 cm , it's height = 5 cm, then it's width is Cm
- 55 A is a part of a circular region .
- 56 the colored part represent Of the circle 
- 57 Color $\frac{1}{2}$ of the circle . 
- 58  $30 \div \frac{1}{3} = \dots\dots\dots$
- 59  $\div \frac{1}{5} = 25$
- 60 the sum of all fractions in one circle =
- 61 $7 \frac{8}{8}$ is equivalent to
- 62 90 seconds = minutes
- 63 The smallest same denominator of $\frac{1}{4}$ and $\frac{3}{8}$ is
- 64 $\frac{1}{\dots\dots\dots} = \frac{2}{8}$
- 65 Estimate the sum of $\frac{1}{6} + \frac{6}{7}$ using benchmarks,
- 66 The LCM of denominators of $\frac{4}{5}$ and $\frac{2}{25}$ is



67 $\frac{6}{9} - \frac{3}{9} = \dots\dots\dots$ In simplest form

68 $\dots\dots\dots + \frac{2}{9} = 1$

69  ABC is an equilateral triangle where AB = 4 cm , then AC =And BC =

70 $3 + \frac{1}{8} + \frac{7}{8} = \dots\dots\dots$

71 $R - \frac{2}{6} = \frac{1}{3}$, then the value of R is


72 $\frac{1}{4} + \frac{3}{4} = 1 - \dots\dots\dots$


73 $\frac{1}{12}$ year = Months


74 $2\frac{1}{4}$ hours = hours + minutes

75 24 months = Year

76 120 seconds = minutes

77  $\frac{3}{2} \times 2 = \dots\dots\dots$

78  $2\frac{2}{5} \times 3 = \dots\dots\dots$

79  $\frac{8}{9} \times 0.125 = \dots\dots\dots$

80 $1 - \frac{3}{8} - \frac{2}{8} = \dots\dots\dots$

81 color $\frac{1}{8}$ of the circle .



Question 03

Answer the following

- 1 find the volume of this solid .



- 2 Mohamed bought a book by $\frac{1}{3}$ of his money and a candy by $\frac{2}{7}$ of his money and saved the left money . What fraction of money does Mohamed save ?

- 3 Yara's garden consists of $\frac{3}{8}$ poppies , $\frac{1}{4}$ roses and flowers in the rest of the garden what fraction of the flowers in the garden ?



- 4 Besan collected $6\frac{2}{7}$ of honey . She gave his sister Sandy $3\frac{3}{4}$ kg of them . How many kilograms are left ?
-

- 5 Yousef spent $\frac{5}{6}$ of his money for buying candy and $\frac{3}{4}$ for buying clothes . Write their fractions with like denominators .
-

- 6 find the volume of this solid .



- 7 Lena ate $1\frac{3}{4}$ kg of fruits , Yasin ate $\frac{1}{5}$ kg more than Lena and Jana ate $\frac{3}{10}$ kg less than Yasin . How many kilograms did Jana eat ?
-

- 8 Seif studied MATH for $3\frac{1}{4}$ hours and science for 30 minutes . How many hours did Seif study in all ?
-

- 9 Esraa notice that $\frac{1}{3}$ of the 9 rose bushes are in bloom . How many rose bushes are in bloom ?



- 10 Maya ate $\frac{1}{4}$ of 24 candies . How many candies are left ?



- 11 write three different multiplication expressions that have the same product as $5 \times \frac{4}{8}$



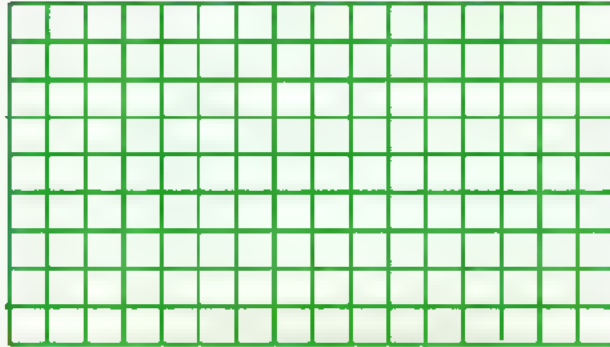
- 12 Dareen bought $3\frac{1}{8}$ liters of water for $\frac{4}{5}$ for each liter . How much money did Dareen pay ?



- 13 Mohamed bought 3 bags of meat . Each bag has a mass of $2\frac{1}{9}$ kg . If he gave $4\frac{2}{3}$ kg to Rozana . How many kilograms left ?
-



14 Draw two different rectangles with an area 24 square units .



15 A rectangular room of $1\frac{1}{4}$ m wide and 4 m long . Find the area .

.....

16 Mr Mahmoud Elkholy is reading a chapter book in MATH . He can read $10\frac{2}{3}$ pages in 1 hour . How many pages will he read in 15 minutes ?

.....

17 If the price of 16 candies 26 L.E. .find the price of each one .

.....

18 Plot the points on the coordinate plane :

A(2 , 4) B (7 , 4) C(7 , 7) D (2 , 7)

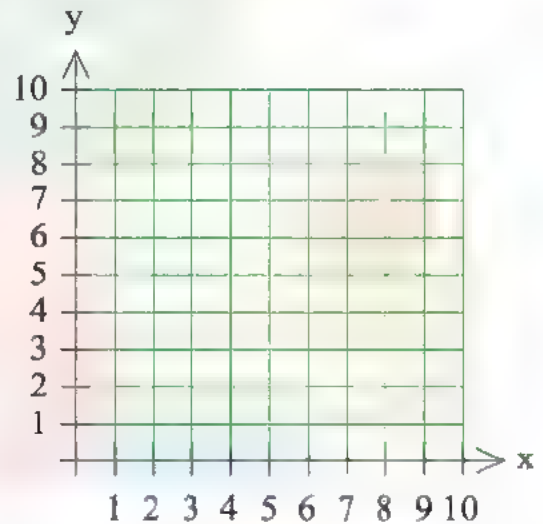
- what is the name of the figure ABCD ? Rectangle

- what is the length of AB ?

- what is the length of BC ?

- CD //

- AB is perpendicular to



19 How many $\frac{1}{6}$ cup in 6 cups of chocolate ?

.....

20 Mr Mahmoud Elkholy wants to give $\frac{1}{5}$ of a box candies to each student he has 9 boxes . To how many students will he be able to give candies ?

.....

21 Find the area of the opposite rectangle .

.....



- 22 Sofian wants to design a cuboid room of volume 12000000 cm^3 , it's length = 300 cm and it's height = 200 cm, find it's width .

.....

- 23 A cuboid with a square base it's length 20 cm . 24000 cm^3 oil was poured into it . What is the height of the oil ?

.....

- 24 MR Mahmoud Elkholy walked $1\frac{1}{2}$ km and his student Ebrahim walked $2\frac{3}{5}$ km more . What distance that Ebrahim walked ?

.....

- 25 if the volume = 300 cm^3 , find the height of this solid .

.....



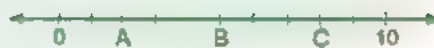
- 26 Samira studied MATH for $1\frac{1}{2}$ hours and science for 40 minutes . How many minutes did Samira study in all ?

.....

- 27 Answer with the number line .

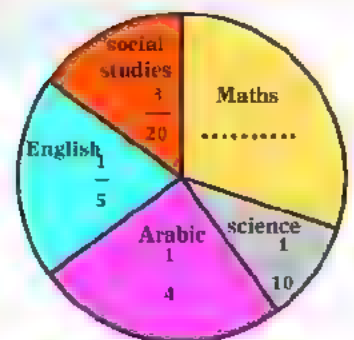
3

- what is the value of A ?
- what is the value of B ?
- what is the value of C ?
- what is the distance between A and C ?



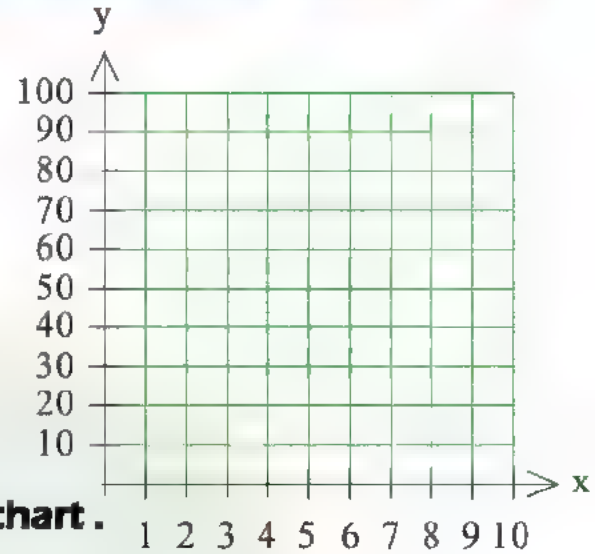
- 28 The opposite figure shows the fraction of time that Eyad spends in studying subjects . He studied 20 hours .

- what's the decimal of the time that Eyad spends in studying Maths ?
- what's the fraction of the time that Eyad spends in studying Maths ?
- what's the measure of the central angle of science ?
- what's the measure of the central angle of Arabic ?
- How many hours did he study English ?
- How many hours did he study Arabic ?
- How many hours did he study science ?



- 29 Ahmed's car consumes 1 Liter of petrol to cover 5 km , complete the table and graph the points on the grid .

Petrol	Distance
1	5
2	10
4	20
6	30
9	45
10	50



- How many liters are needed to cover 40 km ?
- 12 liters can be consumed to cover Km

- 30 Represent these data by the opposite pie chart .

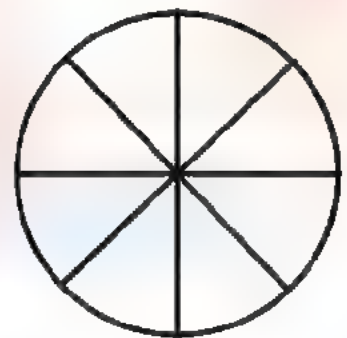
Rate	excellent	good	pass	weak
Fraction	$\frac{3}{20}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$

- If the total number of students is 100 students ,
- 1- find the number of good students .
- 2- find the number of pass students .
- 3- find the number of week students .
- 4 - find the number of excellent students .



- 31 In the opposite circle . This represents 80 students .

- Shade $\frac{1}{2}$ of the circle green .
- Shade $\frac{1}{8}$ of the circle red .
- Shade $\frac{1}{4}$ of the circle blue .
- Shade $\frac{1}{8}$ of the circle yellow .
- what decimal of the group is blue ?
- what decimal of the group is green ?
- what decimal of the group is green ?
- How many students do the green represent ?
- How many students do the blue represent ?
- How many students do the black and red represent ?

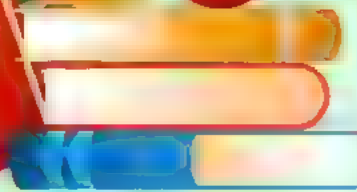
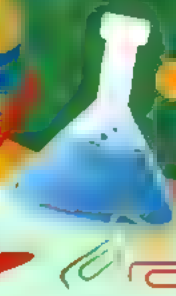
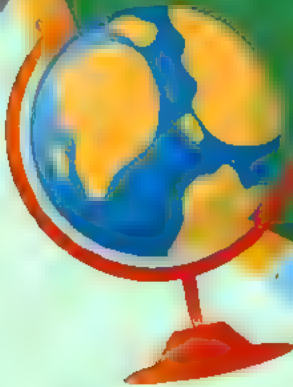


انتهت الاسئلة مع اطيب الامنيات بالنجاح والتوفيق



بنك أسئلة

الصف
الخامس
الابتدائي
٢٠٢٣



Model Answers

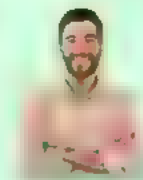
Math

second term final revision

5
الصف
الخامس

by

MR . Mahmoud Elkhoully



El.Motamyez.School


تم إعداد هذا الكتاب من قبل الأستاذة / منة / محمد / سعيد
أو من خلال صفحة "التميز" / أ / محمود / سعيد
يرجى مراجعة حقوق طبع وحقوق النشر عند النشر

EL MOTAMYEZ - MATH QUESTIONS BANK

FINAL REVISION


Question 01

Choose the correct answer




- 1 The smallest like denominator of $\frac{5}{6}$ and $\frac{1}{3}$ is
- (a) 18 (b) 6 (c) 3 (d) 2
- 2 The simplest form of form of $\frac{6}{12}$ is
- (a) $\frac{1}{2}$ (b) $\frac{2}{3}$ (c) $\frac{5}{6}$ (d) $\frac{12}{6}$
- 3 Estimate the sum of $\frac{1}{6} + \frac{7}{8}$ using benchmarks,
- (a) $\frac{25}{24}$ (b) 1 (c) $\frac{1}{2}$ (d) 0
- 4 $\frac{2}{6} \times 3 = \dots\dots\dots$
- (a) $\frac{5}{6}$ (b) 1 (c) 36 (d) $\frac{12}{3}$
- 5 $3\frac{2}{5} \times 5 = \dots\dots\dots$
- (a) $\frac{17}{5}$ (b) 5 (c) 17 (d) $3\frac{10}{5}$
- 6 It is impossible to draw a triangle with two Angles .
- (a) Acute (b) Obtuse (c) right (d) both b and c
- 7 the measure of an acute angle may be °
- (a) 0° (b) 40° (c) 90° (d) 170°
- 8 $\frac{4}{11} \times \dots\dots\dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$
- (a) $\frac{14}{11}$ (b) $3\frac{1}{2}$ (c) 4 (d) $\frac{6}{11}$
- 9 $\frac{8}{15} \times b = \frac{8}{15} + \frac{8}{15} + \frac{4}{15}$, then b =
- (a) $\frac{20}{15}$ (b) $3\frac{1}{2}$ (c) 3 (d) 2.5
- 10 $7\frac{3}{4}$ hours = hours + minutes
- (a) 7 , 30 (b) 7 , $\frac{1}{2}$ (c) 7 , 15 (d) 7 , 45
- 11 the opposite triangle is 
- (a) right (b) Obtuse (c) acute (d) otherwise





- 12 $\frac{4}{9} \times 0.5 = \dots\dots\dots$
 (a) $\frac{8}{9}$ (b) $\frac{20}{9}$ (c) 20 (d) $\frac{2}{9}$
- 13 $\frac{8}{15} \times 0.25 = \dots\dots\dots$
 (a) $\frac{1}{4}$ (b) $\frac{25}{15}$ (c) 24 (d) $\frac{2}{15}$
- 14 It is impossible to draw a triangle with one Angles .
 (a) Acute (b) Obtuse (c) right (d) both b and c
- 15 Volume of  is Cube units .
 (a) 3 (b) 4 (c) 5 (d) 10
- 16 the solid which has 5 vertices and 8 edges is
 (a) Cone (b) Cube (c) cuboid (d) Pyramid
- 17 the measure of an acute angle the measure of an obtuse angle
 (a) < (b) > (c) = (d) otherwise
- 18 $8 \div e = 40$, then $e = \dots\dots\dots$
 (a) 40 (b) $\frac{9}{40}$ (c) 5 (d) $\frac{1}{5}$
- 19 $\frac{8}{9} + \frac{2}{6}$ is about $1\frac{1}{2}$, the estimation is
 (a) overestimate (b) underestimate
- 20 $\frac{7}{9} - \frac{3}{9} = \dots\dots\dots$
 (a) $\frac{4}{9}$ (b) $\frac{5}{9}$ (c) 1 (d) $\frac{10}{9}$
- 21 $m(\angle A) = 40^\circ$, $m(\angle B) = 70^\circ$, $m(\angle C) = 70^\circ$, then it is atriangle .
 (a) right (b) Obtuse (c) acute (d) otherwise
- 22 $3\frac{2}{6} \times \frac{\dots}{6} = 3\frac{2}{6}$
 (a) $\frac{6}{6}$ (b) $3\frac{2}{6}$ (c) 6 (d) $\frac{1}{3}$
- 23 $\frac{6}{6} \times 2 = \dots\dots\dots$
 (a) $\frac{6}{6}$ (b) $2\frac{1}{6}$ (c) 2 (d) $\frac{5}{2}$
- 24 $3\frac{1}{2}$ hours = hours + minutes
 (a) 3 , 30 (b) 3 , $\frac{1}{2}$ (c) 3 (d) 4 , 2
- 25 $\frac{1}{5} \div 7 = \dots\dots\dots$
 (a) 1 (b) $\frac{1}{35}$ (c) 35 (d) $\frac{5}{7}$



- 26  the opposite triangle is
 (a) scalene (b) Equilateral (c) isosceles (d) otherwise
- 27 Data can be represented by
 (a) Line plot (b) Pie graph (c) pictograph (d) All of them
- 28  Triangle has 2 acute angles and 1 right angle .
 (a) right (b) Obtuse (c) right (d) otherwise
- 29  the measure of an obtuse angle is 90°
 (a) < (b) > (c) = (d) otherwise
- 30 the number of horizontal layer is
 (a) 3 (b) 4 (c) 5 (d) 10
- 31 the cube has Faces .
 (a) 12 (b) 6 (c) 0 (d) 8
- 32 18 months = Year
 (a) $\frac{18}{12}$ (b) $3\frac{1}{6}$ (c) 3 (d) All of them
- 33 the simplest form of $4\frac{2}{10}$ is
 (a) $4\frac{3}{4}$ (b) $4\frac{1}{5}$ (c) $\frac{42}{10}$ (d) $2\frac{3}{4}$
- 34 $\frac{25}{8}$ is equivalent to
 (a) $2\frac{1}{8}$ (b) $3\frac{1}{25}$ (c) $3\frac{1}{8}$ (d) $\frac{8}{25}$
- 35 $3\frac{5}{6}$ is equivalent to
 (a) $2\frac{5}{6}$ (b) $4\frac{1}{25}$ (c) $3\frac{1}{6}$ (d) $\frac{23}{6}$
- 36 $3\frac{2}{6}$ is equivalent to
 (a) $2\frac{8}{6}$ (b) $3\frac{1}{6}$ (c) $2\frac{2}{6}$ (d) $\frac{23}{6}$
- 37 $8\frac{8}{8}$ is equivalent to
 (a) $9\frac{5}{6}$ (b) $8\frac{1}{8}$ (c) 81 (d) 9
- 38 $4\frac{1}{10}$ is equivalent to
 (a) $4\frac{20}{100}$ (b) $4\frac{1}{5}$ (c) $\frac{42}{10}$ (d) All of them





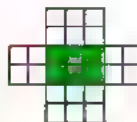
39 $m(\angle A) = 90^\circ$, $m(\angle B) = 60^\circ$, $m(\angle C) = 30^\circ$, then it is atriangle .

- (a) right (b) Obtuse (c) acute (d) otherwise

40 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3\frac{1}{5} - \dots\dots\dots$

- (a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$

41 the volume of this solid is Cube units .



- (a) 12 (b) 3 (c) 2 (d) 9

42 Triangle has 2 acute angles and 1 obtuse angle .

- (a) right (b) Obtuse (c) right (d) otherwise

43 the measure of a right angle is°

- (a) 0° (b) 40° (c) 90° (d) 180°

44 $\frac{4}{6} \times \frac{4}{9} \times \frac{3}{16} = \dots\dots\dots$

- (a) $\frac{124}{186}$ (b) $2\frac{2}{16}$ (c) 3 (d) $\frac{1}{18}$

45 $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \dots\dots\dots = \frac{1}{4}$

- (a) 4 (b) 2 (c) 3 (d) 1

46 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3 + \frac{1}{5} - \dots\dots\dots$

- (a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$

47 $\frac{8}{7} \times 3 = 4 \times \frac{\dots\dots\dots}{7}$

- (a) 8 (b) 4 (c) 3 (d) 6

48 $\frac{16}{9} \times \frac{3}{4} \dots\dots\dots \frac{2}{6} \times \frac{3}{8}$

- (a) < (b) > (c) = (d) otherwise

49 $m(\angle G) = 110^\circ$, $m(\angle D) = 35^\circ$, $m(\angle F) = 35^\circ$, then it is antriangle

- (a) right (b) Obtuse (c) acute (d) otherwise







50 $4\frac{2}{3} + 3\frac{9}{10}$ is estimated as

- (a) $4\frac{1}{2} + 4$ (b) $1 + \frac{1}{2}$ (c) $4 + \frac{1}{2}$ (d) $31 + 4\frac{1}{2}$

51 Length \times width \times height =

- (a) Area (b) Perimeter (c) volume (d) Base area



- 52 $m - \frac{5}{7} = \frac{1}{4}$, then the value of m is
 (a) $\frac{27}{28}$ (b) $\frac{13}{28}$ (c) $\frac{1}{4}$ (d) $\frac{5}{7}$
- 53 $\frac{7}{14} + e = 1$, then the value of e is
 (a) $\frac{8}{14}$ (b) $\frac{1}{2}$ (c) $\frac{5}{14}$ (d) $\frac{5}{7}$
- 54 $\frac{11}{16} - a = \frac{1}{4}$, then the value of a is
 (a) $\frac{8}{16}$ (b) $\frac{7}{16}$ (c) $\frac{10}{12}$ (d) $\frac{6}{6}$
- 55 $\frac{12}{20}$ is equivalent to
 (a) $\frac{8}{10}$ (b) $\frac{3}{5}$ (c) $\frac{10}{12}$ (d) $\frac{6}{5}$
- 56 $4 \frac{1}{12}$ years = years + months
 (a) 4 , 2 (b) 4 , $\frac{1}{12}$ (c) 4 , 1 (d) 4 , 12
- 57  Triangle has 3 acute angles and 0 obtuse angle .
 (a) right (b) Obtuse (c) acute (d) otherwise
- 58  the measure of an obtuse angle may be °
 (a) 0° (b) 40° (c) 90° (d) 110°
- 59  $\frac{3}{4} - \frac{3}{8}$ $\frac{7}{25} \times \frac{5}{21}$
 (a) < (b) > (c) = (d) otherwise
- 60  $2 \frac{2}{6} \times \frac{3}{7} =$
 (a) $\frac{14}{21}$ (b) $3 \frac{1}{2}$ (c) 1 (d) $\frac{14}{6}$
- 61  AB = BC = 6.32 cm , AC is less than them , then it is antriangle .
 (a) scalene (b) Equilateral (c) isosceles (d) otherwise
- 62 the volume of this solid is Cubes. 
 (a) 3 (b) 4 (c) 5 (d) 10
- 63 the sum of the measures of angles around at a point is equal°
 (a) 270 (b) 90 (c) 360 (d) 180
- 64 $5 \frac{2}{8} + 3 \frac{6}{8} =$
 (a) 9 (b) $8 \frac{1}{6}$ (c) $8 \frac{4}{6}$ (d) $\frac{4}{6}$





65 $6\frac{1}{5} - 2\frac{3}{5} = \dots\dots\dots$

(a) $4\frac{4}{5}$

(b) $4\frac{2}{5}$

(c) $3\frac{3}{5}$

(d) $\frac{31}{5}$

66 $3\frac{1}{8} + 2\frac{3}{8} = \dots\dots\dots$

(a) $5\frac{4}{5}$

(b) $5\frac{1}{2}$

(c) $1\frac{4}{8}$

(d) $1\frac{2}{8}$

67 $9\frac{3}{9} - 3\frac{1}{3} = \dots\dots\dots$

(a) $6\frac{2}{3}$

(b) $6\frac{7}{9}$

(c) $6\frac{1}{9}$

(d) 6

68 $3\frac{2}{3} \times \frac{1}{5} = \frac{1}{5} \times 3 + \frac{1}{5} \times \dots\dots\dots$

(a) $\frac{2}{3}$

(b) $3\frac{2}{3}$

(c) 3

(d) $\frac{8}{3}$

69 $45 \text{ minutes} = \dots\dots\dots \text{Hours}$

(a) $\frac{1}{2}$

(b) $\frac{1}{4}$

(c) 1

(d) $\frac{3}{4}$

70 $\text{base area} \times \text{height} = \dots\dots\dots$

(a) Area

(b) Perimeter

(c) volume

(d) Base area

71 $\dots\dots\dots \text{Triangle has 3 different sides.}$

(a) scalene

(b) Equilateral

(c) isosceles

(d) otherwise

72 A $\dots\dots\dots$ is bounded by an arc and two radii.

(a) Height

(b) Pie graph

(c) sector

(d) Bar graph

73 the colored part represent $\dots\dots\dots$ Of the circle.

(a) $\frac{1}{4}$

(b) 0.5

(c) $\frac{3}{4}$

(d) 0.25



74 $75 \text{ minutes} = \dots\dots\dots \text{Hours}$

(a) $\frac{1}{2}$

(b) $1\frac{1}{4}$

(c) 1

(d) $\frac{3}{4}$

75 Which is equal to $6 \times \frac{3}{9}$

(a) 2

(b) $3 \times \frac{6}{9}$

(c) $18 \times \frac{1}{9}$

(d) all of them

76 $5 + \frac{3}{5} + \frac{2}{5} = \dots\dots\dots$

(a) $5\frac{2}{5}$

(b) 6

(c) $\frac{18}{4}$

(d) 4



- 77 $\frac{2}{3} + \frac{7}{12} = 1 + \dots\dots\dots$
 (a) $\frac{2}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$
- 78 $\frac{1}{4} + \frac{3}{12} = 1 - \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$
- 79 $3 \frac{3}{4} = \dots\dots\dots \div 4$
 (a) 12 (b) 4 (c) 3 (d) 15
- 80 $\dots\dots\dots = 13 \div 5$
 (a) 2 (b) 5 (c) $2 \frac{3}{5}$ (d) 18
- 81 $\frac{1}{2}$ year = $\dots\dots\dots$ Months
 (a) 5 (b) 6 (c) 2 (d) 1
- 82 $8 \frac{1}{9} + 3 \frac{5}{12}$ is estimated as $\dots\dots\dots$
 (a) $8 \frac{1}{2} + 3$ (b) $8 + 3 \frac{1}{2}$ (c) $0 + \frac{1}{2}$ (d) $8 \frac{1}{2} + 3.5$
- 83 $8 \frac{1}{6} + 3.5 = \dots\dots\dots$
 (a) $11 \frac{2}{3}$ (b) $11 \frac{1}{6}$ (c) $4 \frac{2}{3}$ (d) 5
- 84 volume \div height = $\dots\dots\dots$
 (a) Height (b) Width (c) volume (d) Base area
- 85 $\dots\dots\dots$ Triangle has 2 same sides and 1 different .
 (a) scalene (b) Equilateral (c) isosceles (d) otherwise
- 86 $4 \frac{3}{7} + \dots\dots\dots = 5 \frac{1}{3}$
 (a) $9 \frac{4}{21}$ (b) $1 \frac{16}{21}$ (c) 1 (d) $\frac{19}{21}$
- 87 $m - 7 \frac{2}{12} = 3 \frac{1}{4}$, then the value of m is $\dots\dots\dots$
 (a) $10 \frac{5}{12}$ (b) $3 \frac{11}{12}$ (c) 4 (d) $4 \frac{1}{8}$
- 88 $a + 6 \frac{4}{12} = 9 \frac{3}{4}$, then the value of a is $\dots\dots\dots$
 (a) $3 \frac{5}{12}$ (b) $15 \frac{7}{12}$ (c) 2.5 (d) $16 \frac{1}{12}$
- 89 $5 \frac{1}{5} - e = 3 \frac{1}{5}$, then the value of e is $\dots\dots\dots$
 (a) $2 \frac{2}{5}$ (b) $1 \frac{3}{5}$ (c) $1 \frac{4}{5}$ (d) $8 \frac{4}{5}$





- 90 volume \div (length \times width) =
 (a) Height (b) Width (c) volume (d) Base area
- 91 $24 \div 7 = \dots\dots\dots + 3$
 (a) $\frac{3}{3}$ (b) $\frac{1}{8}$ (c) 3 (d) $\frac{3}{7}$
- 92 $25 \div \dots\dots\dots = 6 \frac{1}{4}$
 (a) 6 (b) $\frac{1}{4}$ (c) 4 (d) $\frac{6}{25}$
- 93 $\frac{2}{3} + \frac{7}{12}$ is estimated as
 (a) $\frac{1}{2} + \frac{1}{2}$ (b) $\frac{1}{2} + 1$ (c) $0 + \frac{1}{2}$ (d) $1 + 1$
- 94 $\frac{8}{9} + \frac{1}{100}$ is estimated as
 (a) $\frac{1}{2} + \frac{1}{2}$ (b) $\frac{1}{2} + 1$ (c) $0 + \frac{1}{2}$ (d) $1 + 0$
- 95 $2 - \frac{2}{5} - \frac{1}{5} = \dots\dots\dots$
 (a) $1 \frac{2}{5}$ (b) $\frac{2}{5}$ (c) $\frac{2}{3}$ (d) 1
- 96 $7 \frac{m}{10}$ is slightly greater than $7 \frac{1}{2}$, then m can be
 (a) 11 (b) 5 (c) 6 (d) 1
- 97 volume \div (length \times height) =
 (a) Height (b) Width (c) volume (d) Base area
- 98 the measure of this central angle is°
 (a) 360 (b) 270 (c) 90 (d) 180
- 99 $\frac{1}{8} + \frac{6}{5}$ is about 1, the estimation is
 (a) overestimate (b) underestimate
- 100 the measure of an obtuse angle the measure of a right angle
 (a) < (b) > (c) = (d) otherwise
- 101 $\frac{1}{6}$ year = Months
 (a) 5 (b) 6 (c) 2 (d) 1
- 102 the angle whose vertex is the center of the circle is calledangle .
 (a) Central (b) Circular (c) right (d) Straight
- 103 $\frac{2}{8} + \frac{6}{8} = \dots\dots\dots$
 (a) $\frac{4}{6}$ (b) $\frac{2}{3}$ (c) 1 (d) $\frac{6}{8}$



- 104 $3\frac{12}{c}$ is slightly greater than 4 , then c can be
 (a) 11 (b) 9 (c) 13 (d) 12
- 105 If the volume of a cuboid = 30 cm^3 and base area = 15 cm^2 , then it's height is Cm
 (a) 5 (b) 2 (c) 15 (d) 150
- 106 $4 \div \frac{1}{4}$ $\frac{1}{4} \div 4$
 (a) < (b) > (c) = (d) otherwise
- 107 $\frac{1}{5}$ hour = Minutes
12 (b) 7 (c) 5 (d) 1
- 108 $\frac{5}{9} + \frac{4}{7}$ is about 1 , the estimation is
 (a) overestimate (b) underestimate
- 109 $\frac{1}{\dots\dots\dots} = \frac{8}{24}$
 (a) 0 (b) 2 (c) 3 (d) 1
- 110 $\frac{1}{4} + \frac{3}{16} = \dots\dots\dots$
 (a) $\frac{7}{16}$ (b) 0 (c) 16 (d) $\frac{4}{20}$
- 111 $1\frac{1}{8}$ day = hours
 (a) 24 (b) 8 (c) 27 (d) 2
- 112 $\dots\dots\dots \div \frac{1}{6} = 24$
 (a) 4 (b) $\frac{1}{4}$ (c) 36 (d) $\frac{6}{24}$
- 113 $\frac{1}{8} \div m = \frac{1}{32}$, then m=
 (a) 4 (b) $\frac{1}{4}$ (c) 32 (d) $\frac{8}{32}$
- 114 A is a circle divided into sectors .
 (a) Height (b) Pie graph (c) sector (d) Bar graph
- 115 the measure of an acute angle the measure of a right angle
 (a) < (b) > (c) = (d) otherwise
- 116 Estimate the difference of $\frac{9}{11} - \frac{2}{5}$ using benchmarks,
 (a) $\frac{7}{6}$ (b) $\frac{1}{2}$ (c) 0 (d) 1



- 117 The LCM of denominators of $\frac{4}{7}$ and $\frac{2}{5}$ is
- (a) 7 (b) 35 (c) 5 (d) $\frac{6}{35}$
- 118 90 minutes = hours
- (a) $12\frac{1}{2}$ (b) $3\frac{1}{2}$ (c) 30 (d) $1\frac{1}{2}$
- 119 $\frac{1}{4} \div \frac{1}{2} = \dots\dots\dots$
- (a) 4 (b) $\frac{1}{4}$ (c) 8 (d) $\frac{1}{2}$
- 120 $10 \div \frac{1}{5} = \dots\dots\dots$
- (a) 2 (b) $\frac{1}{5}$ (c) 50 (d) $\frac{5}{10}$
- 121 $1 - \frac{3}{5} - \frac{2}{5} = \dots\dots\dots$
- (a) 0 (b) 2 (c) $\frac{5}{5}$ (d) 1
- 122 $\frac{2}{5} = \frac{\dots}{15}$
- (a) 0 (b) 2 (c) 3 (d) 6
- 123 $\frac{1}{\dots} = \frac{12}{24}$
- (a) 0 (b) 2 (c) 3 (d) 1
- 124 $8 \div \frac{1}{4} \dots\dots\dots 4 \div \frac{1}{8}$
- (a) < (b) > (c) = (d) otherwise
- 125 $\frac{1}{5} + \frac{2}{3} = \dots\dots\dots$
- (a) $\frac{13}{15}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$
- 126 $\dots\dots\dots + \frac{5}{8} = 1$
- (a) $\frac{4}{8}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$
- 127 $\dots\dots\dots + \frac{5}{10} = 1$
- (a) $\frac{1}{2}$ (b) $\frac{5}{10}$ (c) $\frac{4}{8}$ (d) all of them
- 128 $1 - \dots\dots\dots = 0$
- (a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{2}{3}$ (d) 0
- 129 $1 - \dots\dots\dots = 1$
- (a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{0}{3}$ (d) 1



Question 02

complete

1 the number of vertical layer is2.....



2 $\frac{3}{12} \times \frac{3}{8} \times \frac{2}{6} = \dots\dots\dots \frac{1}{32} \dots\dots\dots$

3 scalene triangle has 3different..... sides .

4 $4 \frac{4}{8} \times \frac{...8...}{8} = 4 \frac{1}{2}$

5 $\frac{2}{8} \times 3 \times \frac{2}{6} = \dots\dots\dots \frac{1}{4} \dots\dots\dots$

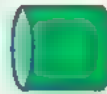
6 $\frac{100}{100} \times 5 \frac{6}{12} = \dots\dots\dots 5 \frac{6}{12} \dots\dots\dots$

7 $3 \frac{2}{5} \times 5 = 5 \times \dots\dots\dots \frac{17}{5} \dots\dots\dots$

8 $\frac{2}{5} \times 3 = 6 \times \dots\dots\dots \frac{1}{5} \dots\dots\dots$

9 $\frac{3}{2} \times \frac{12}{24} = \dots\dots\dots \frac{3}{4} \dots\dots\dots$

10 the figure name iscylinder.....



11 $\frac{2}{11} \times \dots\dots\dots \frac{3}{2} \dots\dots\dots - \frac{3}{11}$

12 $\dots\dots\dots \frac{6}{2} \dots\dots\dots \times \frac{3}{8} \times \frac{2}{6} = \frac{3}{8}$

13 $\frac{2}{3} \times \dots\dots\dots \frac{3}{4} \dots\dots\dots = \frac{6}{12}$

14 Volume =3.....x...2.....x...2.....



15 $\dots\dots\dots \frac{2}{4} \dots\dots\dots \times \frac{5}{6} = \frac{10}{24}$

16acute..... Triangle has 3 acute angles and 0 right angle .

17 $\frac{3}{5} \times 1.5 \times 30 = \dots\dots\dots \underline{27} \dots\dots\dots$

18 if the volume = 1200 cm³ , then the missing dimension is6.....cm



19 $\frac{4}{11} \times \dots\dots\dots \underline{3.5} \dots\dots\dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

20 $3 \frac{3}{5} \times \dots\dots\dots \frac{5}{18} \dots\dots\dots = 1$



21 $3 \frac{2}{3} \times \frac{1}{5} = \dots \frac{1}{5} \dots \times 3 + \dots \frac{1}{5} \dots \times \frac{2}{3}$

22 15 minutes = $\dots \frac{1}{4} \dots$ Hours

23 $\dots 30 \dots$ minutes = $\frac{1}{2}$ Hours

24 $2 \div 4 = \dots \frac{2}{4} \dots$

25 $23 \div 4 = \dots 5 \frac{3}{4} \dots$

26 $34 \div 5 = 6 + \dots \frac{4}{5} \dots$

27 $40 \div \dots 9 \dots = 4 \frac{4}{9}$

28 $18 \div \frac{1}{2} = 18 \times \dots 2 \dots$

29 the measure of this central angle is $\dots 180 \dots^\circ$



30 $\frac{4}{11} \times \dots 4 \dots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{4}{11}$

31 $d \div \frac{1}{5} = \frac{1}{2}$, then $d = \dots \frac{1}{10} \dots$

32 $\frac{1}{7} \div n = \frac{1}{21}$, then $n = \dots 3 \dots$

33 $6 \div f = 24$, then $f = \dots \frac{1}{4} \dots$

34 Any triangle has at least $\dots 2 \dots$ Acute angles .

35 Volume of  is $\dots 4 \dots$ Cube units .

36 $\dots \text{acute} \dots$ Triangle has 3 acute angles .

37 $\frac{1}{6} + \frac{3}{6} = \dots \frac{2}{3} \dots$ In simplest form

38 color $\frac{1}{4}$ of the circle .



39 the measure of a right angle is $\dots \text{equal} \dots 90^\circ$











40 the sum of all decimals in one circle = $\dots 1 \dots$

41 the measure of an obtuse angle is $\dots \text{more than} \dots 90^\circ$






42 the triangle has $\dots 3 \dots$ sides and $\dots 3 \dots$ angles

43 The simplest form of form of $\frac{2}{24}$ is $\dots \frac{1}{12} \dots$




- 44  the Area of the opposite figure is ...**21**... square units 
- 45 the sphere has**0**.... vertex .
- 46  the measure of an acute angle is**less than**..... 90°
- 47  $\frac{2}{6} \times 2.5 = \dots\dots\dots \frac{5}{6} \dots\dots\dots$
- 48**face**.....is a flat surface of a solid figure .
- 49  $\frac{5}{8} \times 0.4 = \dots\dots\dots \frac{1}{4} \dots\dots\dots$
- 50 **equilateral**..... Triangle has 3 equal sides .
- 51 volume \div base area =**height**.....
- 52 volume \div (width \times height) =**length**.....
- 53 $\frac{2}{3}$ year =**8**..... Months
- 54 If the volume of a cuboid = 400 cm^3 , it's length = 10 cm , it's height = 5 cm, then it's width is**8**..... Cm
- 55 A**circular sector**.....is a part of a circular region .
- 56 the colored part represent **$\frac{3}{4}$** Of the circle 
- 57 Color $\frac{1}{2}$ of the circle . 
- 58  $30 \div \frac{1}{3} = \dots\dots\dots \text{90} \dots\dots\dots$
- 59 **5**..... $\div \frac{1}{5} = 25$
- 60 the sum of all fractions in one circle =**1**.....
- 61 $7 \frac{8}{8}$ is equivalent to**8**.....
- 62 90 seconds = **$1 \frac{1}{2}$** minutes
- 63 The smallest same denominator of $\frac{1}{4}$ and $\frac{3}{8}$ is**8**.....
- 64 $\frac{1}{\dots\dots 4 \dots\dots} = \frac{2}{8}$
- 65 Estimate the sum of $\frac{1}{6} + \frac{6}{7}$ using benchmarks,**1**.....
- 66 The LCM of denominators of $\frac{4}{5}$ and $\frac{2}{25}$ is**25**.....



- 67 $\frac{6}{9} - \frac{3}{9} = \dots\dots\dots \frac{1}{3} \dots\dots\dots$ In simplest form
- 68 $\dots\dots \frac{7}{9} \dots\dots + \frac{2}{9} = 1$
- 69  ABC is an equilateral triangle where $AB = 4$ cm , then $AC = \dots\dots 4 \dots\dots$ And $BC = \dots\dots 4 \dots\dots$
- 70 $3 + \frac{1}{8} + \frac{7}{8} = \dots\dots\dots 4 \dots\dots\dots$
- 71 $R - \frac{2}{6} = \frac{1}{3}$, then the value of R is $\dots\dots \frac{2}{3} \dots\dots$
- 72 $\frac{1}{4} + \frac{3}{4} = 1 - \dots\dots\dots 0 \dots\dots\dots$
- 73 $\frac{1}{12}$ year = $\dots\dots\dots 1 \dots\dots\dots$ Months
- 74 $2\frac{1}{4}$ hours = $\dots\dots 2 \dots\dots$ hours + $\dots\dots 15 \dots\dots$ minutes
- 75 24 months = $\dots\dots\dots 2 \dots\dots\dots$ Year
- 76 120 seconds = $\dots\dots\dots 2 \dots\dots\dots$ minutes
- 77  $\frac{3}{2} \times 2 = \dots\dots\dots 3 \dots\dots\dots$
- 78  $2\frac{2}{5} \times 3 = \dots\dots\dots 7\frac{1}{5} \dots\dots\dots$
- 79  $\frac{8}{9} \times 0.125 = \dots\dots\dots \frac{1}{9} \dots\dots\dots$
- 80 $1 - \frac{3}{8} - \frac{2}{8} = \dots\dots\dots \frac{3}{8} \dots\dots\dots$
- 81 color $\frac{1}{8}$ of the circle . 

Question 03

Answer the following

- 1 find the volume of this solid . 
 $V = L \times W \times H$, , , $V = 20 \times 3 \times 4 = 240 \text{ cm}^3$
- 2 Mohamed bought a book by $\frac{1}{3}$ of his money and a candy by $\frac{2}{7}$ of his money and saved the left money . What fraction of money does Mohamed save ?
 $\frac{1}{3} + \frac{2}{7} = \frac{13}{21}$ ——— $1 - \frac{13}{21} = \frac{8}{21}$ of his money
- 3 Yara's garden consists of $\frac{3}{8}$ poppies , $\frac{1}{4}$ roses and flowers in the rest of the garden what fraction of the flowers in the garden ?
 $\frac{3}{8} + \frac{1}{4} = \frac{5}{8}$ ——— $1 - \frac{5}{8} = \frac{3}{8}$



- 4 Besan collected $6\frac{2}{7}$ of honey . She gave his sister Sandy $3\frac{3}{4}$ kg of them . How many kilograms are left ?

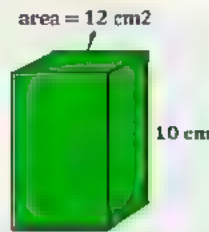
$$6\frac{2}{7} - 3\frac{3}{4} = 2\frac{15}{28}$$

- 5 Yousef spent $\frac{5}{6}$ of his money for buying candy and $\frac{3}{4}$ for buying clothes . Write their fractions with like denominators .

$$\frac{10}{12} , \quad \frac{9}{12}$$

- 6 find the volume of this solid .

$$V = B.A \times H \quad , , , \quad V = 12 \times 10 = 120 \text{ cm}^3$$



- 7 Lena ate $1\frac{3}{4}$ kg of fruits , Yasin ate $\frac{1}{5}$ kg more than Lena and Jana ate $\frac{3}{10}$ kg less than Yasin . How many kilograms did Jana eat ?

$$\text{yasin} = 1\frac{3}{4} + \frac{1}{5} = 1\frac{19}{20} \text{ kg}$$

$$\text{Jana} = 1\frac{19}{20} - \frac{3}{10} = 1\frac{13}{20} \text{ kg}$$

- 8 Seif studied MATH for $3\frac{1}{4}$ hours and science for 30 minutes . How many hours did Seif study in all ?

$$3\frac{1}{4} + \frac{1}{2} = 3\frac{3}{4} \text{ hours}$$

- 9 Esraa notice that $\frac{1}{3}$ of the 9 rose bushes are in bloom . How many rose bushes are in bloom ?

$$\frac{1}{3} \times 9 = 3 \text{ rose bushes}$$

- 10 Maya ate $\frac{1}{4}$ of 24 candies . How many candies are left ?

$$\frac{3}{4} \times 24 = 18 \text{ candies}$$

- 11 write three different multiplication expressions that have the same product as $5 \times \frac{4}{8}$

$$\frac{3}{4} \times \frac{5}{8} , \quad \frac{4}{8} \times 5 , \quad 20 \times \frac{1}{8}$$

- 12 Dareen bought $3\frac{1}{8}$ liters of water for $\frac{4}{5}$ for each liter . How much money did Dareen pay ?

$$\frac{4}{5} \times 3\frac{1}{8} = 2.5 \text{ LE}$$

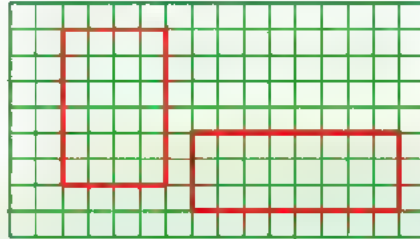




- 13 Mohamed bought 3 bags of meat . Each bag has a mass of $2\frac{1}{9}$ kg . If he gave $4\frac{2}{3}$ kg to Rozana . How many kilograms left ?

$$3 \times 2\frac{1}{9} = 6\frac{1}{3} \text{ kg} \quad \longrightarrow \quad 6\frac{1}{3} - 4\frac{2}{3} = 1\frac{2}{3} \text{ kg}$$

- 14 Draw two different rectangles with an area 24 square units .



- 15 A rectangular room of $1\frac{1}{4}$ m wide and 4 m long . Find the area .

$$4 \times 1\frac{1}{4} = 5 \text{ square meter}$$

- 16 Mr Mahmoud Elkholy is reading a chapter book in MATH . He can read $10\frac{2}{3}$ pages in 1 hour . How many pages will he read in 15 minutes ?

$$15 \text{ min} = \frac{1}{4} \text{ hours} \quad \longrightarrow \quad 10\frac{2}{3} \times \frac{1}{4} = 2\frac{2}{3} \text{ pages}$$

- 17 If the price of 16 candies 26 L.E. .find the price of each one .

$$26 \div 16 = 1\frac{5}{8} \text{ LE}$$

- 18 Plot the points on the coordinate plane :

A(2 , 4) B (7 , 4) C(7 , 7) D (2 , 7)

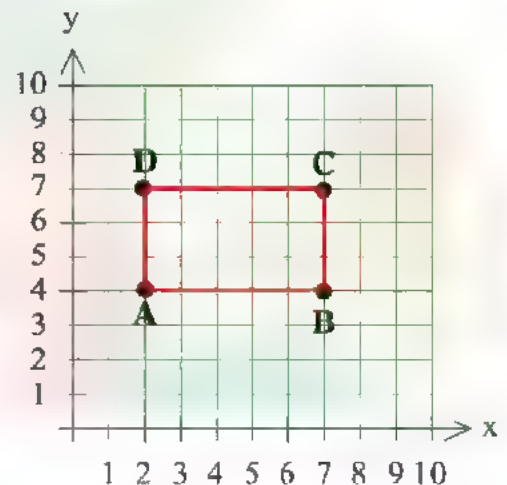
- what is the name of the figure ABCD ? Rectangle

- what is the length of AB ? 5

- what is the length of BC ? 3

- CD //BA.....

- AB is perpendicular toBC.....



- 19 How many $\frac{1}{6}$ cup in 6 cups of chocolate ?

$$6 \div \frac{1}{6} = 36 \text{ cups}$$

- 20 Mr Mahmoud Elkholy wants to give $\frac{1}{5}$ of a box candies to each student he has 9 boxes . To how many students will he be able to give candies ?

$$9 \div \frac{1}{5} = 45 \text{ students}$$

- 21 Find the area of the opposite rectangle .

$$8 \times 3\frac{1}{2} = 28 \text{ square cm}$$





- 22 Sofian wants to design a cuboid room of volume 12000000 cm^3 , it's length = 300 cm and it's height = 200 cm, find it's width .

$$W = V \div (L \times H) \quad \therefore W = 12000000 \div (300 \times 200) = 200 \text{ cm}$$

- 23 A cuboid with a square base it's length 20 cm . 24000 cm^3 oil was poured into it . What is the height of the oil ?

$$H = V \div (L \times W) \quad \therefore H = 24000 \div (20 \times 20) = 60 \text{ cm}$$

- 24 MR Mahmoud Elkholy walked $1\frac{1}{2}$ km and his student Ebrahim walked $2\frac{3}{5}$ km more . What distance that Ebrahim walked ?

$$1\frac{1}{2} + 2\frac{3}{5} = 4\frac{1}{10} \text{ km}$$

- 25 if the volume = 300 cm^3 , find the height of this solid .

$$H = V \div (L \times W) \quad \therefore H = 300 \div (6 \times 5) = 10 \text{ cm}$$



- 26 Samira studied MATH for $1\frac{1}{2}$ hours and science for 40 minutes . How many minutes did Samira study in all ?

$$1\frac{1}{2} \times 60 = 90 \text{ min} \quad \backslash \backslash \quad 90 + 40 = 130 \text{ min}$$

- 27 Answer with the number line .

3

- what is the value of A ? 2

- what is the value of B ? 5

- what is the value of C ? 8

- what is the distance between A and C ? 6



- 28 The opposite figure shows the fraction of time that Eyad spends in studying subjects . He studied 20 hours .

- what's the decimal of the time that Eyad spends in studying

Maths ? 0.3

- what's the fraction of the time that Eyad spends in studying

Maths ? $\frac{3}{10}$

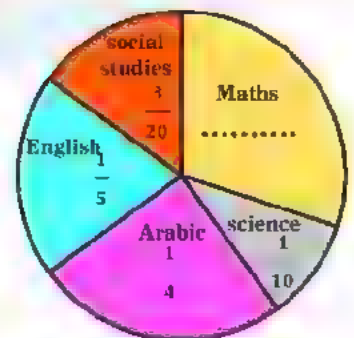
- what's the measure of the central angle of science ? 36°

- what's the measure of the central angle of Arabic ? 90°

- How many hours did he study English ? 4 HOURS

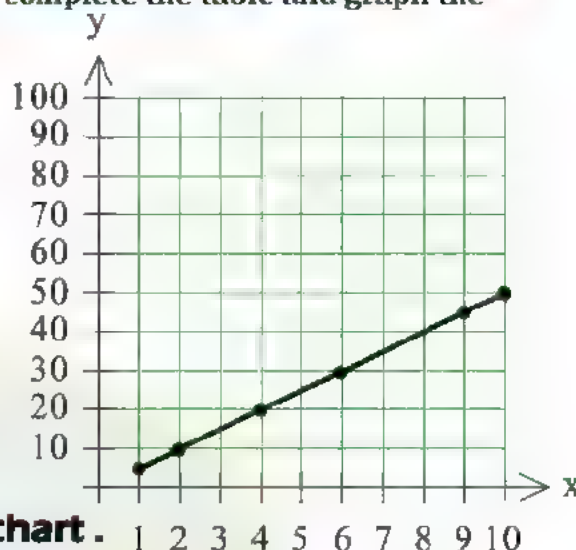
- How many hours did he study Arabic ? 5 HOURS

- How many hours did he study science ? 2 HOURS



- 29 Ahmed's car consumes 1 Liter of petrol to cover 5 km , complete the table and graph the points on the grid .

Petrol	Distance
1	5
2	10
4	20
6	30
9	45
10	50



- How many liters are needed to cover 40 km ? 8 L
 - 12 liters can be consumed to cover60..... Km

- 30 Represent these data by the opposite pie chart .

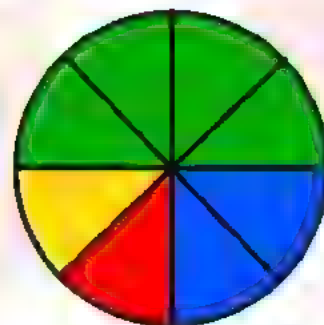
Rate	excellent	good	pass	weak
Fraction	$\frac{3}{20}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$

- If the total number of students is 100 students ,
 1- find the number of good students . 50 students
 2- find the number of pass students . 25 students
 3- find the number of week students . 10 students
 4- find the number of excellent students . 15 students



- 31 In the opposite circle . This represents 80 students .

- Shade $\frac{1}{2}$ of the circle green .
 - Shade $\frac{1}{8}$ of the circle red .
 - Shade $\frac{1}{4}$ of the circle blue .
 - Shade $\frac{1}{8}$ of the circle yellow .
 - what decimal of the group is blue ? 0.25
 - what decimal of the group is green ? 0.5
 - what decimal of the group is red ? 0.125
 - How many students do the green represent ? $\frac{1}{2} \times 80 = 40$ students
 - How many students do the blue represent ? $\frac{1}{4} \times 80 = 20$ students
 - How many students do the yellow and red represent ? $\frac{1}{4} \times 80 = 20$ students



تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



Equivalent fractions and The simplest form (Simplify)

Choose



1	The mixed number $1\frac{2}{3} =$ _____ as an improper fraction A. $\frac{3}{2}$ B. $\frac{2}{3}$ C. $\frac{5}{3}$ D. $\frac{5}{2}$
2	The mixed number $7\frac{4}{5} =$ _____ as an improper fraction A. $\frac{39}{5}$ B. $\frac{39}{4}$ C. $\frac{35}{5}$ D. $\frac{28}{5}$
3	$2\frac{1}{5} =$ _____ as an improper fraction A. $\frac{2}{5}$ B. $\frac{5}{2}$ C. $\frac{11}{2}$ D. $\frac{11}{5}$
4	The improper fraction $\frac{7}{2} =$ _____ A. $3\frac{1}{2}$ B. $7\frac{2}{5}$ C. $2\frac{5}{7}$ D. $2\frac{2}{5}$
5	The improper fraction $\frac{19}{5} =$ _____ A. $4\frac{3}{5}$ B. $1\frac{9}{5}$ C. $3\frac{4}{5}$ D. $3\frac{1}{5}$
6	$\frac{27}{7} =$ _____ as a mixed number A. $7\frac{2}{3}$ B. $3\frac{6}{7}$ C. $2\frac{3}{7}$ D. $3\frac{3}{5}$
7	$\frac{49}{8} =$ _____ as a mixed number A. $8\frac{1}{6}$ B. $1\frac{5}{8}$ C. $1\frac{6}{8}$ D. $6\frac{1}{8}$
8	$\frac{100}{9} =$ _____ as a mixed number A. $9\frac{1}{11}$ B. $11\frac{1}{9}$ C. $11\frac{3}{9}$ D. $9\frac{9}{10}$
9	$2\frac{5}{9}$ is equivalent to _____ A. $\frac{17}{9}$ B. $\frac{23}{9}$ C. $\frac{17}{9}$ D. $\frac{10}{9}$
10	$3\frac{2}{5}$ is equivalent to _____ A. $\frac{17}{2}$ B. $\frac{17}{5}$ C. $\frac{3}{5}$ D. $\frac{15}{2}$
11	Which of the following is equivalent to $\frac{5}{6}$? A. $\frac{15}{16}$ B. $\frac{10}{8}$ C. $1\frac{1}{5}$ D. $\frac{20}{24}$
12	$\frac{19}{5}$ is equivalent to _____ A. $3\frac{3}{5}$ B. $4\frac{1}{5}$ C. $3\frac{5}{5}$ D. $3\frac{4}{5}$
13	$\frac{17}{3}$ is equivalent to _____ A. $3\frac{1}{6}$ B. $7\frac{1}{2}$ C. $3\frac{2}{5}$ D. $5\frac{2}{3}$
14	The fraction $\frac{3}{4}$ is equivalent to _____ A. $\frac{9}{16}$ B. $\frac{9}{12}$ C. $\frac{4}{3}$ D. $1\frac{1}{3}$

Equivalent fractions
using multiply or divide

$\frac{10}{15} \xrightarrow{\times 2} \frac{20}{30}$ OR $\frac{10}{15} \xrightarrow{\div 5} \frac{2}{3}$

improper \Rightarrow mixed

$\frac{25}{6} \Rightarrow 4\frac{1}{6}$

mixed \Rightarrow improper

$2\frac{3}{8} \Rightarrow \frac{19}{8}$

15	Which of the following is not equivalent to $\frac{6}{8}$? A. $\frac{3}{4}$ B. $\frac{60}{80}$ C. $\frac{12}{18}$ D. $\frac{30}{40}$
16	The fraction $\frac{2}{4}$ is equivalent to — A. $\frac{12}{14}$ B. $\frac{6}{12}$ C. $\frac{6}{7}$ D. $\frac{20}{45}$
17	The fraction $\frac{10}{15}$ is equivalent to — A. $\frac{4}{6}$ B. $\frac{2}{5}$ C. $1\frac{1}{2}$ D. $\frac{20}{33}$
18	The equivalent fraction of $\frac{3}{6}$ is — A. $\frac{3}{5}$ B. $\frac{2}{6}$ C. $\frac{15}{30}$ D. $\frac{2}{5}$
19	If $\frac{5}{8} = \frac{x}{40}$, then $x =$ — A. 37 B. 25 C. 40 D. 5×8
20	$\frac{25}{4}$ is equivalent to A. $2\frac{5}{4}$ B. $5\frac{2}{4}$ C. $6 + \frac{1}{4}$ D. $4 + \frac{1}{6}$
21	The simplest form of $\frac{36}{48}$ is — A. $\frac{6}{8}$ B. $\frac{3}{2}$ C. $\frac{2}{3}$ D. $\frac{3}{4}$
22	The simplest form of the fraction $\frac{20}{45}$ is — A. $\frac{4}{9}$ B. $\frac{5}{9}$ C. $\frac{10}{9}$ D. $\frac{1}{5}$
23	The simplest form of the fraction $\frac{7}{21}$ is — A. $\frac{1}{7}$ B. $\frac{3}{7}$ C. $\frac{4}{7}$ D. $\frac{1}{3}$
24	The simplest form of $3\frac{4}{6}$ is — A. $3\frac{2}{6}$ B. $\frac{22}{6}$ C. $\frac{2}{3}$ D. $3\frac{2}{3}$
25	Which of the following is correct ? A. $\frac{3}{2} = \frac{4}{6}$ B. $\frac{7}{8} = \frac{5}{6}$ C. $\frac{7}{14} = \frac{1}{2}$ D. $\frac{3}{2} = \frac{9}{5}$
26	The simplest form of $\frac{12}{18}$ is A. $\frac{2}{8}$ B. $\frac{2}{3}$ C. $\frac{18}{12}$ D. 1
27	$\frac{5}{15}$ $\frac{1}{3}$ A. > B. < C. =

Fraction in simplest form

$$\frac{12}{32} = \frac{3}{8}$$

Mixed number in simplest form

$$5\frac{4}{8} = 5\frac{1}{2}$$

Complete	
28	$8\frac{1}{5} =$ _____ as an improper fraction
29	$3\frac{2}{11} =$ _____ as an improper fraction
30	$\frac{9}{5} =$ _____ as a mixed number
31	If $\frac{24}{36} = \frac{2}{k}$, then $k =$ _____
32	If $\frac{5}{7} = \frac{x}{28}$, then $x =$ _____
33	The simplest form of $\frac{12}{18}$ is _____
34	If $\frac{3}{4} = \frac{a}{16}$, then $a =$ _____

Regrouping The whole number

Choose	
35	1 = _____ A. $\frac{1}{5}$ B. $\frac{3}{3}$ C. $1\frac{3}{3}$ D. 2
36	4 = _____ A. $3\frac{6}{6}$ B. $\frac{3}{4}$ C. 3 D. $4\frac{1}{3}$
37	7 = _____ A. $7\frac{3}{5}$ B. $\frac{14}{3}$ C. $6\frac{10}{10}$ D. $7\frac{5}{5}$
38	11 = _____ A. $11\frac{7}{7}$ B. $\frac{1}{11}$ C. $11\frac{1}{2}$ D. $10\frac{2}{2}$
39	5 = _____ A. $5\frac{2}{2}$ B. $4\frac{5}{5}$ C. $5\frac{1}{3}$ D. $4\frac{3}{5}$
40	6 = _____ A. $5 + \frac{2}{2}$ B. $6\frac{5}{5}$ C. $6\frac{1}{2}$ D. $5\frac{1}{6}$

$1 = \frac{5}{5} \text{ OR } \frac{8}{8} \text{ OR } \frac{\text{Any number}}{\text{Same number}}$
 $2 = 1\frac{7}{7} \text{ OR } 1\frac{8}{8} \text{ OR } 1\frac{\text{Any number}}{\text{Same number}}$
 $10 = 9\frac{2}{2} \text{ OR } 9\frac{4}{4} \text{ OR } 9\frac{\text{Any number}}{\text{Same number}}$

Regrouping The mixed number

Choose	
41	The fraction $2\frac{1}{4}$ by regrouping is _____ A. $2\frac{5}{4}$ B. $\frac{9}{2}$ C. $1\frac{5}{4}$ D. $\frac{5}{4}$
42	The mixed number $4\frac{1}{3}$ can be regrouped as _____ A. $\frac{13}{4}$ B. $3\frac{1}{4}$ C. $3\frac{4}{3}$ D. $4 + \frac{1}{3}$
43	The fraction $5\frac{3}{7}$ by regrouping is _____ A. $5\frac{10}{7}$ B. $4\frac{10}{7}$ C. $3\frac{10}{7}$ D. $\frac{38}{3}$
44	$2\frac{5}{6} = 1\frac{a}{6}$ by regrouping, then $a =$ _____ A. 5 B. 11 C. 6 D. 2

Regrouping
 $5\frac{3}{7} = 4\frac{10}{7}$

45	$5\frac{2}{5}$ can be regrouped as _____ A. $\frac{27}{5}$ B. $5\frac{7}{5}$ C. $\frac{7}{5}$ D. $4\frac{7}{5}$
46	If $3\frac{1}{7} = 2\frac{X}{7}$ by regrouping, then X = _____ A. 1 B. 2 C. 3 D. 8
47	$3\frac{4}{7}$ can be regrouped as _____ A. 3 B. 4 C. $2\frac{11}{7}$ D. $2\frac{4}{7}$

Regrouping to have mixed number

Choose	
48	$3\frac{5}{3} =$ _____ as a mixed number A. $3\frac{3}{5}$ B. $\frac{14}{3}$ C. $5\frac{1}{3}$ D. $4\frac{2}{3}$
49	$7\frac{8}{5} =$ _____ as a mixed number A. 7 B. 35 C. $8\frac{3}{5}$ D. $7\frac{3}{5}$
50	$1\frac{3}{2} =$ _____ as a mixed number A. $2\frac{1}{2}$ B. $2\frac{1}{3}$ C. $\frac{1}{2}$ D. $1\frac{1}{2}$
51	$6\frac{10}{7} =$ _____ as a mixed number A. $6\frac{3}{7}$ B. $\frac{7}{10}$ C. $7\frac{3}{7}$ D. $7\frac{3}{10}$
52	$5\frac{19}{15} =$ _____ as a mixed number A. $\frac{4}{15}$ B. $6\frac{4}{15}$ C. $1\frac{5}{19}$ D. $5\frac{4}{15}$


If the numerator is bigger than denominator



$$6\frac{11}{8} = 7\frac{3}{8}$$

+1

LCM for denominators

Choose	
53	The two like denominator fractions represent the models  are _____ A. $\frac{3}{4}, \frac{1}{3}$ B. $\frac{6}{8}, \frac{2}{8}$ C. $\frac{8}{12}, \frac{4}{12}$ D. $\frac{9}{12}, \frac{4}{12}$
54	The LCM of denominators of $\frac{1}{2}$ and $\frac{3}{10}$ is _____ A. 1 B. 2 C. 3 D. 10
55	The two fractions $\frac{1}{5}$ and $\frac{1}{4}$ are equivalent to the two common denominator fractions _____ A. $\frac{4}{5}$ and $\frac{5}{4}$ B. $\frac{4}{9}$ and $\frac{5}{9}$ C. $\frac{4}{45}$ and $\frac{5}{45}$ D. $\frac{5}{20}$ and $\frac{4}{20}$
56	The smallest common denominator of $\frac{2}{3}$ and $\frac{2}{5}$ is _____ A. 2 B. 15 C. 30 D. 35
57	The LCM of denominators of $\frac{7}{12}$ and $\frac{5}{18}$ is _____ A. 12 B. 36 C. 18 D. 6

58	The like denominator of $\frac{3}{7}$ and $\frac{1}{14}$ is _____ A. 3 B. 7 C. 14 D. 1
59	Two fractions $3\frac{2}{3}$ and $5\frac{1}{6}$ with like denominators are _____ A. $3\frac{2}{3}$ and $5\frac{1}{6}$ B. $\frac{11}{3}$ and $\frac{31}{3}$ C. $3\frac{4}{6}$ and $5\frac{1}{6}$ D. $3\frac{2}{3}$ and $5\frac{2}{6}$
60	The LCM of the denominators of $\frac{3}{7}$ and $\frac{1}{3}$ is _____ A. 10 B. 4 C. 21 D. $\frac{7}{3}$
61	Two fractions $2\frac{5}{8}$ and $1\frac{3}{4}$ with like denominators are _____ A. $2\frac{5}{16}$ and $1\frac{3}{16}$ B. $1\frac{5}{8}$ and $2\frac{6}{8}$ C. $2\frac{5}{8}$ and $1\frac{3}{8}$ D. $2\frac{5}{8}$ and $1\frac{6}{8}$

Adding or subtracting fractions with the same denominators

Choose	
62	$\frac{3}{4} + \frac{1}{4} =$ A. $\frac{4}{8}$ B. $\frac{3}{16}$ C. $\frac{8}{8}$ D. $\frac{31}{44}$
63	$\frac{3}{7} + \frac{4}{7} =$ A. $\frac{7}{14}$ B. 1 C. $\frac{34}{77}$ D. $1\frac{7}{7}$
64	$\frac{11}{7} + \frac{2}{7} =$ A. $7\frac{1}{7}$ B. $\frac{13}{14}$ C. $1\frac{6}{7}$ D. $7\frac{2}{3}$
65	$\frac{12}{5} + \frac{3}{5} =$ A. $1\frac{1}{5}$ B. $\frac{15}{10}$ C. 3 D. 5
66	$\frac{9}{12} - \frac{5}{12} =$ A. 4 B. $\frac{1}{3}$ C. $\frac{14}{12}$ D. $\frac{1}{4}$
67	$4\frac{3}{7} + 1\frac{5}{7} =$ A. $5\frac{1}{7}$ B. $6\frac{1}{7}$ C. $5\frac{8}{14}$ D. $6\frac{2}{7}$
68	$1\frac{1}{2} + 7\frac{1}{2} =$ A. $8\frac{1}{2}$ B. 9 C. 8 D. $8\frac{1}{4}$
69	$2\frac{3}{5} + 1\frac{4}{5} =$ A. $3\frac{7}{10}$ B. $4\frac{2}{5}$ C. $1\frac{1}{5}$ D. $2\frac{7}{5}$
70	$9\frac{4}{7} - 9\frac{1}{7} =$ A. 0 B. $9\frac{3}{7}$ C. $\frac{3}{7}$ D. $1\frac{2}{7}$

Same denominators

Keep the denominator and add or subtract the numerators

$$\frac{2}{9} + \frac{5}{9} = \frac{7}{9}$$

$$\frac{11}{20} - \frac{8}{20} = \frac{3}{20}$$

$$2\frac{1}{7} + 1\frac{3}{7} = 3\frac{4}{7}$$











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71	$\frac{9}{12} - \frac{5}{12} =$ A. 4 B. $\frac{1}{3}$ C. $\frac{14}{12}$ D. $\frac{1}{4}$
72	$5\frac{5}{8} - 3\frac{2}{8} =$ A. $8\frac{7}{8}$ B. $3\frac{3}{8}$ C. $2\frac{1}{4}$ D. $2\frac{3}{8}$
73	If $\frac{5}{3} - \frac{2}{3} = a$, then $a =$ _____ A. $\frac{7}{3}$ B. $\frac{3}{3}$ C. $\frac{1}{3}$ D. $\frac{2}{3}$
74	$5\frac{2}{7} + k = 6\frac{5}{7}$, then $k =$ A. $11\frac{7}{7}$ B. $1\frac{3}{7}$ C. $4\frac{3}{7}$ D. $5\frac{1}{7}$
75	If $5 - a = 4\frac{1}{3}$, then $a =$ A. $\frac{1}{3}$ B. $\frac{2}{3}$ C. $4\frac{1}{3}$ D. $4\frac{2}{3}$
76	If $X + 3\frac{1}{8} = 5\frac{3}{8}$, then $X =$ A. $8\frac{1}{2}$ B. $2\frac{2}{16}$ C. $4\frac{2}{8}$ D. $2\frac{1}{4}$
77	$4\frac{3}{5} + k = 6\frac{2}{5}$, then $k =$ A. $1\frac{4}{5}$ B. 11 C. $2\frac{1}{5}$ D. $1\frac{3}{5}$
Complete	
78	$2\frac{5}{6} + 2\frac{3}{6} =$
79	$1\frac{3}{5} + 3\frac{1}{5} =$
80	$8\frac{3}{7} - 8\frac{1}{7} =$
81	$1\frac{2}{3} + 3\frac{2}{3} =$
82	$5\frac{1}{4} - 2\frac{3}{4} =$
83	$2\frac{1}{4} + 2\frac{3}{4} =$
84	$3\frac{2}{5} - 1\frac{4}{5} =$
85	$4\frac{5}{6} - 2\frac{1}{6} =$



LCM of denominators and add or subtract

Choose

86		+		=	
	A. $\frac{8}{12}$	B. $\frac{7}{12}$	C. $\frac{7}{6}$	D. $\frac{5}{6}$	
87		-		=	
	A. $\frac{1}{3}$	B. $\frac{5}{6}$	C. $\frac{1}{6}$	D. 1	
88		+		=	
	A. $\frac{2}{3}$	B. $\frac{3}{4}$	C. 1	D. $\frac{5}{6}$	
89		+		=	
	A. $\frac{1}{3} + \frac{1}{3}$	B. $\frac{1}{2} + \frac{1}{2}$	C. $\frac{1}{2} + \frac{1}{3}$	D. 3 + 2	
90	$\frac{1}{11} + \frac{3}{4} =$				
	A. $\frac{4}{15}$	B. $\frac{37}{44}$	C. $\frac{11}{15}$	D. $\frac{4}{44}$	
91	$3\frac{3}{8} - 2\frac{1}{4} =$				
	A. $1\frac{1}{8}$	B. $1\frac{1}{4}$	C. $2\frac{1}{4}$	D. $\frac{1}{8}$	
92	$1\frac{4}{5} - 1\frac{1}{20} =$				
	A. $\frac{7}{20}$	B. $\frac{4}{3}$	C. $\frac{3}{4}$	D. $1\frac{1}{5}$	
93	$5\frac{1}{2} + 3\frac{1}{5} =$				
	A. $8\frac{2}{7}$	B. $8\frac{7}{10}$	C. $8\frac{1}{2}$	D. $8\frac{2}{5}$	
94	$2\frac{1}{7} + 5\frac{1}{2} =$				
	A. $7\frac{2}{9}$	B. $3\frac{9}{14}$	C. $7\frac{9}{14}$	D. $1\frac{1}{7}$	
95	$\frac{3}{4} + \frac{1}{2} =$				
	A. $\frac{4}{6}$	B. $\frac{3}{8}$	C. $\frac{1}{4}$	D. $1\frac{1}{4}$	
96	$3\frac{1}{2} + 2\frac{1}{3} =$				
	A. $5\frac{5}{6}$	B. $5\frac{2}{5}$	C. $\frac{6}{2} + \frac{6}{3}$	D. $\frac{7}{2} + 3\frac{1}{2}$	



Different denominators

Find LCM of denominators and add or subtract the numerators

$\frac{5}{6} + \frac{1}{3} \Rightarrow \frac{5}{6} + \frac{2}{6} = \frac{7}{6}$ or $1\frac{1}{6}$

$4\frac{5}{7} - 1\frac{1}{4} \Rightarrow 4\frac{20}{28} - 1\frac{7}{28} = 3\frac{13}{28}$



Different denominators

Find LCM of denominators and add or subtract the numerators

$$\frac{5}{6} + \frac{1}{3} \Rightarrow \frac{5}{6} + \frac{2}{6} = \frac{7}{6} \text{ or } 1\frac{1}{6}$$

$$4\frac{5}{7} - 1\frac{1}{4} \Rightarrow 4\frac{20}{28} - 1\frac{7}{28} = 3\frac{13}{28}$$

97	$3\frac{1}{2} - 1\frac{2}{3} =$ _____ A. $1\frac{5}{6}$ B. $6\frac{1}{5}$ C. $5\frac{1}{6}$ D. $1\frac{6}{5}$
98	If $X + 5\frac{1}{4} = 7\frac{3}{4}$, then $X =$ _____ A. $2\frac{1}{4}$ B. $2\frac{1}{2}$ C. $\frac{1}{2}$ D. $\frac{1}{4}$
99	If $\frac{4}{7} + \frac{1}{3} = \frac{X}{21} + \frac{7}{21}$, then $X =$ _____ A. 4 B. 3 C. 7 D. 12
100	$X + 4\frac{1}{4} = 5\frac{1}{2}$, then $X =$ _____ A. $\frac{1}{2}$ B. $\frac{1}{4}$ C. $1\frac{1}{2}$ D. $1\frac{1}{4}$
101	If $\frac{1}{2} + a = \frac{7}{8}$, then $a =$ _____ A. $\frac{6}{8}$ B. $\frac{3}{8}$ C. $\frac{8}{10}$ D. $1\frac{1}{8}$
102	$2\frac{1}{3} + 1\frac{2}{5}$ can be rewrite as _____ A. $\frac{6}{3} + \frac{5}{5}$ B. $\frac{7}{3} + \frac{5}{7}$ C. $[2+1] + [\frac{1}{3} + \frac{2}{5}]$ D. $3\frac{1}{2} + 5\frac{1}{2}$
Complete	
103	$2\frac{2}{5} + 1\frac{1}{2} =$ _____
104	$1\frac{4}{7} - \frac{10}{21} =$ _____
105	$3\frac{2}{3} + 2\frac{4}{5} =$ _____
106	$2\frac{5}{6} - 1\frac{2}{3} =$ _____
107	$2\frac{3}{8} + 5\frac{3}{4} =$ _____
108	$2\frac{3}{5} - 1\frac{1}{3} =$ _____
109	$1\frac{3}{4} - \frac{1}{2} =$ _____
110	$9\frac{2}{3} - 6\frac{1}{2} =$ _____
111	$2\frac{5}{12} + 1\frac{1}{6} =$ _____
112	$3\frac{1}{2} - 1\frac{2}{5} =$ _____
113	$4\frac{5}{8} - 3\frac{1}{6} =$ _____
114	$2\frac{3}{4} + 1\frac{4}{10} =$ _____
115	$7\frac{5}{6} - 4\frac{1}{4} =$ _____

EXCELLENT



116 $2\frac{7}{8} - 1\frac{1}{2} =$

Regrouping in operations

Choose

117 $\frac{17}{5} - 1 =$
A. $5\frac{1}{17}$ B. $2\frac{2}{5}$ C. $\frac{16}{5}$ D. $2\frac{1}{5}$

118 $1 - \frac{3}{4} =$
A. $\frac{1}{4}$ B. $\frac{2}{4}$ C. $\frac{3}{4}$ D. $\frac{4}{4}$

119 $1 - \frac{5}{11} =$
A. $\frac{5}{11}$ B. $1\frac{5}{11}$ C. $1\frac{7}{11}$ D. $\frac{7}{11}$

120 $3 - 2\frac{1}{2} =$
A. $\frac{1}{2}$ B. $1\frac{1}{2}$ C. 1 D. $1\frac{1}{3}$

121 $1 - \frac{1}{2} - \frac{1}{3} =$
A. $\frac{1}{2}$ B. $\frac{1}{3}$ C. $\frac{1}{5}$ D. $\frac{1}{6}$

122 $4 - \frac{3}{5} =$
A. $\frac{1}{5}$ B. $4\frac{3}{5}$ C. $3\frac{2}{5}$ D. $\frac{7}{20}$

123 $5 - \frac{1}{2} - \frac{1}{3} =$
A. $4\frac{5}{6}$ B. $4\frac{1}{2}$ C. $4\frac{1}{6}$ D. $4\frac{3}{4}$

124 $2\frac{1}{4} - 1\frac{1}{2} =$
A. $1\frac{1}{4}$ B. $\frac{3}{4}$ C. $3\frac{3}{4}$ D. $1\frac{1}{2}$

125 $7\frac{1}{11} - 5\frac{5}{11} =$
A. $2\frac{3}{11}$ B. $\frac{4}{11}$ C. $1\frac{7}{11}$ D. $2\frac{4}{11}$

126 $3\frac{4}{9} - 1\frac{2}{3} =$
A. $1\frac{7}{9}$ B. $\frac{7}{9}$ C. $5\frac{1}{9}$ D. $2\frac{2}{9}$

127 $\frac{2}{5} + \frac{3}{8} + 1 =$
A. $1\frac{31}{40}$ B. $1\frac{5}{13}$ C. $1\frac{5}{40}$ D. $1\frac{6}{40}$

Complete

128 $6\frac{1}{5} - 4\frac{3}{4} =$

129 $9\frac{1}{4} - 8\frac{3}{5} =$



$$1 - \frac{5}{8} \Rightarrow \frac{8}{8} - \frac{5}{8} = \frac{3}{8}$$

$$3 - 1\frac{1}{5} \Rightarrow 2\frac{5}{5} - 1\frac{1}{5} = 1\frac{4}{5}$$

$$4\frac{1}{4} - 1\frac{3}{4} \Rightarrow 3\frac{5}{4} - 1\frac{3}{4} = 2\frac{2}{4} = 2\frac{1}{2}$$

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130	$6\frac{1}{3} - 3\frac{4}{5} =$
131	$3\frac{1}{2} - 2\frac{2}{3} =$
132	$7\frac{1}{2} - 2\frac{7}{8} =$
133	$4\frac{1}{4} - 2\frac{5}{6} =$
134	$9\frac{1}{6} - 3\frac{1}{3} =$
135	$5\frac{1}{3} - 2\frac{4}{5} =$
136	$9\frac{1}{4} - 8\frac{3}{5} =$

Estimating using Benchmark

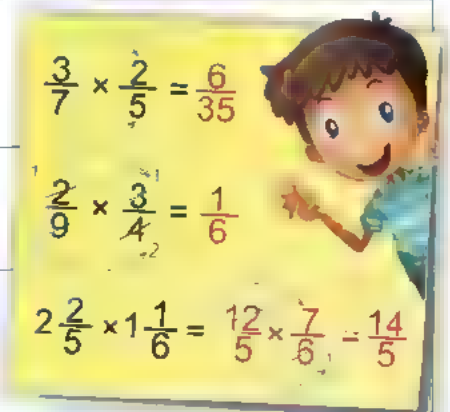
Choose	
137	If $3\frac{x}{29}$ is about 4, then x may be A. 13 B. 2 C. 7 D. 28
138	If $3\frac{2}{a}$ is estimated as 3, then a can equal _____ A. 2 B. 1 C. 4 D. 15
139	If $4\frac{k}{23}$ is about $4\frac{1}{2}$, then k may be = _____ A. 2 B. 3 C. 4 D. 11
140	If $4\frac{m}{17}$ is about 4, then m may be _____ A. 2 B. 8 C. 10 D. 17
141	If $4\frac{h}{54}$ is slightly greater than $4\frac{1}{2}$, then h may be _____ A. 20 B. 4 C. 28 D. 54
142	If $5\frac{20}{y}$ is a little less than 6, then y may be _____ A. 21 B. 5 C. 2 D. 39
143	If $9\frac{x}{5}$ is little greater than $9\frac{1}{2}$, then x is estimated as _____ A. 3 B. 5 C. 2 D. 1
144	If $2\frac{3}{j}$ is a little greater than 2, then j may be -- _____ A. 2 B. 4 C. 6 D. 17
145	If $4\frac{x}{22}$ is slightly greater than $4\frac{1}{2}$, then x can be _____ A. 10 B. 21 C. 5 D. 12
146	If $5\frac{n}{18}$ is about 5, then n may be _____ A. 8 B. 17 C. 2 D. 12

147	If $7\frac{a}{8}$ is a little greater than $7\frac{1}{2}$, then a may be A. 4 B. 5 C. 7 D. 8
148	If $3\frac{5}{m}$ is about 4, then m may be A. 6 B. 8 C. 10 D. 12
149	$5\frac{x}{24}$ is slightly greater than $5\frac{1}{2}$, then x may be A. 23 B. 9 C. 11 D. 13
150	If $5\frac{x}{12}$ is slightly greater than $5\frac{1}{2}$, then x may be equal to — A. 7 B. 11 C. 9 D. 10
151	If $8\frac{3}{c}$ is slightly less than $8\frac{1}{2}$, then c may be — A. 7 B. 4 C. 2 D. 15
152	If $4\frac{b}{7}$ is almost 4, then b may be — A. 1 B. 4 C. 5 D. 6
153	If $2\frac{8}{d}$ is nearly $2\frac{1}{2}$, then d may be — A. 32 B. 5 C. 7 D. 17
154	$\frac{1}{6} + \frac{6}{7}$ is estimated as — A. $\frac{1}{2} + \frac{1}{2}$ B. $0 + 1$ C. $0 + \frac{1}{2}$ D. $\frac{1}{2} + 1$
155	$\frac{1}{4} + \frac{8}{9}$ is estimated as — A. 0 B. $\frac{1}{2}$ C. 1 D. $1\frac{1}{2}$
156	Estimate the sum of $\frac{3}{5} + \frac{7}{8}$ using benchmarks, the sum is A. 2 B. $1\frac{1}{2}$ C. 1 D. $\frac{1}{2}$
157	$5\frac{3}{7} + 2\frac{1}{11}$ can be estimated as — A. 7 B. $7\frac{1}{2}$ C. 8 D. $8\frac{1}{2}$
158	$5\frac{1}{6} + 2\frac{4}{5}$ is estimated as — A. $5 + 3$ B. $6 + 3$ C. $5 + 2$ D. $6 + 4$
159	$8\frac{3}{5} + 1\frac{1}{12}$ can be estimated as — A. 9 B. $9\frac{1}{2}$ C. 10 D. $8\frac{1}{2}$

160	$1\frac{5}{11} + 2\frac{1}{8}$ estimate as A. $1+2$ B. $1+2\frac{1}{2}$ C. $1\frac{1}{2}+2$ D. $2+2$
161	Which of the following is underestimate? A. $\frac{4}{7} + \frac{5}{8}$ is about 1 B. $\frac{3}{7} + \frac{4}{10}$ is about 1 C. $\frac{4}{5} + \frac{7}{8}$ is about 2 D. $\frac{6}{7} + \frac{5}{6}$ is about 2
162	Which of the following is underestimate? A. $6\frac{7}{8} + \frac{5}{6} = 8$ B. $\frac{1}{3} + 1\frac{1}{10} = 1$ C. $\frac{3}{10} + \frac{7}{9} = 1\frac{1}{2}$ D. $5\frac{8}{9} + \frac{8}{7} = 6$
Complete	
163	By using the benchmarks, $\frac{5}{6}$ is estimate as _____
164	$2\frac{b}{9}$ is almost 3 Estimate for b = _____
165	$\frac{7}{12} + \frac{9}{10}$ is estimated as _____
166	$8\frac{2}{3} + 1\frac{5}{6}$ is estimated as _____ + _____
167	$\frac{4}{5} + \frac{7}{6}$ is estimated as _____ + _____ = _____

Multiplying fractions

Choose	
168	$\frac{2}{15} \times 1\frac{1}{5} =$ _____ A. $\frac{2}{25}$ B. $1\frac{3}{15}$ C. $\frac{4}{25}$ D. $1\frac{2}{25}$
169	$2\frac{1}{5} \times 1\frac{2}{3} =$ _____ A. $\frac{2}{3}$ B. $3\frac{2}{3}$ C. $\frac{2}{15}$ D. $2\frac{2}{15}$
170	$0.25 \times \frac{6}{7} =$ _____ A. $\frac{1}{14}$ B. $\frac{1}{7}$ C. $\frac{3}{14}$ D. $\frac{2}{7}$
171	$\frac{5}{9} \times 1\frac{1}{5} =$ _____ A. $\frac{5}{14}$ B. $1\frac{2}{3}$ C. $\frac{2}{3}$ D. $1\frac{9}{25}$
172	$\frac{2}{3} \times \frac{3}{8} \times \frac{8}{9} =$ _____ A. $\frac{1}{3}$ B. $\frac{2}{9}$ C. $\frac{13}{20}$ D. $\frac{2}{17}$
173	$7\frac{1}{2} \times \frac{1}{15} =$ _____ A. 2 B. $\frac{1}{2}$ C. $\frac{16}{17}$ D. $7\frac{1}{30}$



174	$\frac{4}{11} \times 0.5 =$ A. $\frac{2}{11}$ B. $\frac{20}{11}$ C. $\frac{4}{5}$ D. $\frac{55}{4}$
175	$4\frac{2}{3} \times 1\frac{2}{7} =$ ——— A. $4\frac{4}{21}$ B. $5\frac{20}{21}$ C. $4\frac{2}{21}$ D. 6
176	If $a \times \frac{3}{17} = \frac{2}{17}$, then $a =$ ——— A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $\frac{1}{17}$ D. $\frac{5}{17}$
177	$\frac{1}{5} \times 0.5 =$ ——— A. $\frac{2}{7}$ B. $\frac{1}{7}$ C. $\frac{1}{10}$ D. $\frac{1}{25}$
178	$0.25 \times \frac{8}{9} =$ ——— A. $\frac{1}{4}$ B. $\frac{2}{3}$ C. $\frac{4}{9}$ D. $\frac{2}{9}$
179	$\frac{1}{7} \times m = \frac{1}{21}$, then $m =$ ——— A. $\frac{1}{7}$ B. $\frac{1}{21}$ C. $\frac{1}{3}$ D. $\frac{1}{147}$
180	$\frac{4}{3} \times \frac{3}{5}$ is ——— $1\frac{1}{3}$ A. less than B. greater than C. equal to
181	$\frac{3}{7} \times \frac{5}{5}$ is ——— $\frac{3}{7}$ A. greater than B. less than C. equal to
182	$\frac{4}{7} \times \frac{14}{8}$ is ——— $\frac{4}{7}$ A. less than B. greater than C. equal to
183	$\frac{3}{5} \times \frac{5}{3}$ is ——— $\frac{3}{5}$ A. less than B. greater than C. equal to
184	$\frac{5}{3} \times \frac{4}{7}$ is ——— $\frac{5}{3}$ A. less than B. greater than C. equal to
185	$\frac{3}{4} \times \frac{12}{150}$ is ——— $\frac{3}{4}$ A. less than B. greater than C. equal to
186	$3\frac{5}{6} \times \frac{7}{4}$ is ——— $3\frac{5}{6}$ A. less than B. greater than C. equal to
Complete	
187	$\frac{1}{2} \times \frac{1}{5} =$ ———

$$0.25 = \frac{25}{100} = \frac{1}{4}$$

$$0.5 = \frac{5}{10} = \frac{1}{2}$$

188	$\frac{3}{4} \times \frac{1}{2} =$	
189	$\frac{3}{4} \times \frac{3}{8} =$	
190	$\frac{3}{5} \times \frac{1}{4} =$	 Well done!
191	$\frac{1}{3} \times \frac{3}{8} =$	
192	$\frac{5}{8} \times \frac{3}{3} =$	
193	$\frac{5}{12} \times \frac{3}{5} =$	
194	$\frac{3}{9} \times \frac{3}{4} =$	
195	$\frac{1}{2} \times \frac{2}{8} =$	
196	$\frac{5}{8} \times \frac{2}{15} =$	
197	$\frac{5}{10} \times \frac{8}{10} =$	
198	$\frac{1}{4} \times \frac{8}{11} =$	
199	$\frac{2}{3} \times \frac{6}{7} \times \frac{7}{8} =$	
200	$\frac{4}{10} \times \frac{25}{3} \times \frac{3}{15} =$	
201	$2\frac{2}{5} \times 1\frac{1}{2} =$	
202	$2\frac{1}{2} \times 1\frac{1}{10} =$	
203	$1\frac{2}{3} \times \frac{3}{10} =$	
204	$2\frac{3}{4} \times 1\frac{2}{3} =$	
205	$3\frac{4}{6} \times \frac{1}{4} =$	
206	$0.25 \times \frac{8}{9} =$	
207	$2\frac{2}{5} \times \frac{2}{3} =$	
208	$\frac{4}{5} \times \quad = \frac{4}{15}$	
209	$\frac{1}{4} \times \frac{\quad}{3} = \frac{7}{12}$	
210	$\frac{2}{7} \times \quad = \frac{10}{49}$	



Well done!

مستر احمد عيسى



211	$\text{_____} \times \frac{3}{8} = \frac{15}{24}$
212	$\text{_____} \times \frac{3}{5} = \frac{6}{15}$
213	$\frac{5}{4} \times \frac{3}{8} = \text{_____}$
214	$\frac{1}{2} \times \text{_____} = \frac{3}{8}$

The product = 1

Choose	
215	$\frac{3}{11} \times \frac{11}{3} = \text{_____}$ A. $\frac{3}{11}$ B. $\frac{11}{3}$ C. 1 D. $\frac{1}{2}$
216	$\frac{1}{2} \times 2 = \text{_____}$ A. $\frac{1}{4}$ B. $\frac{3}{2}$ C. 1 D. 4
217	$\frac{1}{7} \times 7 = \text{_____}$ A. $\frac{1}{14}$ B. $\frac{1}{49}$ C. 7 D. 1
218	$5 \times \frac{1}{5} = \text{_____}$ A. 1 B. $\frac{1}{5}$ C. 25 D. 0
219	$\frac{5}{6} \times \text{_____} = 1$ A. $\frac{5}{6}$ B. $\frac{4}{5}$ C. $\frac{6}{5}$ D. $\frac{1}{6}$
220	$2\frac{1}{3} \times \text{_____} = 1$ A. $\frac{3}{2}$ B. $\frac{1}{3}$ C. $\frac{7}{3}$ D. $\frac{3}{7}$
221	$2\frac{1}{3} \times \frac{3}{7} = \text{_____}$ A. $\frac{4}{4}$ B. $\frac{3}{7}$ C. $2\frac{1}{7}$ D. $\frac{7}{3}$
222	$\text{_____} \times 5\frac{2}{5} = 1$ A. $\frac{5}{27}$ B. $\frac{27}{5}$ C. $\frac{5}{2}$ D. $1\frac{2}{5}$
223	$\text{_____} \times 1\frac{1}{2} = 1$ A. $\frac{1}{2}$ B. $\frac{3}{2}$ C. $\frac{2}{3}$ D. $\frac{1}{3}$
224	$1\frac{1}{5} \times \text{_____} = 1$ A. 5 B. $\frac{5}{4}$ C. $\frac{5}{6}$ D. $\frac{6}{5}$
225	$2\frac{1}{3} \times \text{_____} = 1$ A. $\frac{7}{3}$ B. $\frac{3}{7}$ C. $3\frac{1}{2}$ D. 6
226	$\frac{3}{4} \times \text{_____} = 1$ A. $\frac{3}{4}$ B. $\frac{4}{3}$ C. $\frac{1}{4}$ D. $\frac{1}{3}$

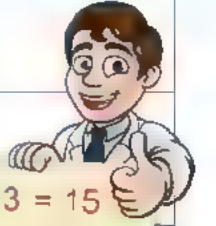
$$\frac{7}{5} \times \frac{5}{7} = 1$$

$$1\frac{2}{3} \times \frac{3}{5} \Rightarrow \frac{5}{3} \times \frac{3}{5} = 1$$

Dividing fractions

Choose

227	$7 \div \frac{1}{2} =$ _____ A. $3\frac{1}{2}$ B. 3 C. 14 D. 16	
228	$12 \div 8 = 1\frac{1}{2}$ A. 2 B. 3 C. 4 D. 5	
229	$13 \div \frac{1}{4} =$ _____ A. $\frac{13}{4}$ B. $\frac{1}{52}$ C. 17 D. 52	
230	$3 \div \frac{1}{5} =$ _____ A. $\frac{3}{5}$ B. $\frac{1}{15}$ C. 15 D. $\frac{5}{3}$	
231	$13 \div 7$ equals each of the following except _____ A. $1 + \frac{6}{7}$ B. $1\frac{6}{7}$ C. $\frac{26}{14}$ D. $1 \times \frac{6}{7}$	
232	$16 \div 7 = 2\frac{2}{7}$ A. 7 B. 14 C. 16 D. 4	
233	$\frac{1}{3} \div 5 =$ _____ A. $\frac{5}{3}$ B. $\frac{3}{5}$ C. 15 D. $\frac{1}{15}$	
234	$4 \div \frac{1}{2} =$ _____ A. 6 B. 2 C. 8 D. $4\frac{1}{2}$	
235	$7 \div \frac{1}{2} =$ _____ A. $3\frac{1}{2}$ B. 3 C. 14 D. 16	
236	$15 \div \frac{1}{2} =$ _____ A. $\frac{15}{2}$ B. $7\frac{1}{2}$ C. 30 D. $\frac{2}{15}$	
237	$\frac{1}{2} \div 6 =$ _____ A. 3 B. $\frac{1}{12}$ C. $\frac{2}{6}$ D. $\frac{1}{8}$	
238	$15 \div 4 =$ _____ + 3 A. 12 B. 3 C. $\frac{4}{3}$ D. $\frac{3}{4}$	
239	$14 \div 5 =$ _____ + 2 A. $\frac{2}{5}$ B. $\frac{3}{5}$ C. $\frac{4}{5}$ D. $\frac{1}{5}$	



$$5 \div \frac{1}{3} \Rightarrow 5 \times 3 = 15$$

$$\frac{1}{4} \div 7 \Rightarrow \frac{1}{4} \times \frac{1}{7} = \frac{1}{28}$$

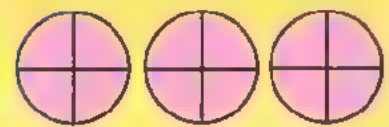
$$\frac{1}{9} \div \frac{4}{11} \Rightarrow \frac{1}{9} \times \frac{11}{4} = \frac{11}{36}$$

مستر احمد عيسى

240	If $17 \div 8 = a \frac{1}{8}$, then $a =$ _____ A. 2 B. 8 C. 17 D. 1
241	If $\frac{1}{2} \div m = \frac{1}{16}$, then $m =$ _____ A. 8 B. $\frac{1}{8}$ C. 16 D. $\frac{1}{14}$
242	If $6 \div h = 30$, then $h =$ _____ A. $\frac{1}{5}$ B. 180 C. 5 D. 90
243	If $\frac{1}{2} \div 3 = X$, then $X =$ _____ A. $1\frac{1}{2}$ B. $\frac{1}{6}$ C. 6 D. $\frac{2}{3}$
244	If $8 \div m = 24$, then $m =$ _____ A. 3 B. $\frac{1}{3}$ C. $1\frac{1}{3}$ D. 32
245	$12 \div 5$ equals each of the following except _____ A. $\frac{5}{12}$ B. $\frac{12}{5}$ C. $2\frac{2}{5}$ D. $2 + \frac{2}{5}$
246	How many fifths are there in 7 ? A. $5 \div 7$ B. 5×7 C. $5 + 7$ D. $7 - 5$
247	How many thirds are there in 2 ? A. 5 B. 2 C. 6 D. $\frac{3}{2}$
248	The number of fifths in 4 is _____ A. 9 B. 1 C. 20 D. $\frac{5}{4}$
249	How many thirds are there in 9 ? A. 18 B. 27 C. 36 D. 24
250	The number of thirds in one is _____ A. 1 B. 2 C. 3 D. $\frac{1}{3}$
251	If we divide 7 oranges among 5 persons, then each person has _____ orange. A. $\frac{5}{7}$ B. $1\frac{1}{5}$ C. $2\frac{1}{5}$ D. $1\frac{2}{5}$
252	If Ahmed bought 7 kg of meat and wanted to divide it into 5 meals, then the number of kg in each meal = _____ kg A. 7×5 B. $5 \div 7$ C. $1\frac{2}{5}$ D. $7 - 5$
Complete	
253	$5 \div \frac{1}{2} =$ _____

How many fourths in 3 ?

$$3 \div \frac{1}{4} \Rightarrow 3 \times 4 = 12$$

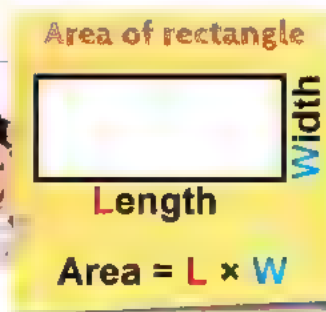


254	$7 \div \frac{1}{4} =$
255	$\frac{1}{3} \div 6 =$
256	$\frac{1}{6} \div 4 =$
257	$13 \div \frac{1}{4} =$
258	$3 \div \frac{1}{5} =$



Area of a rectangle

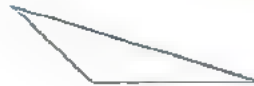
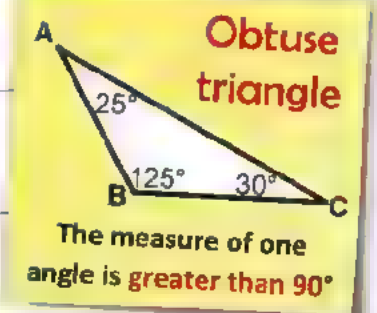
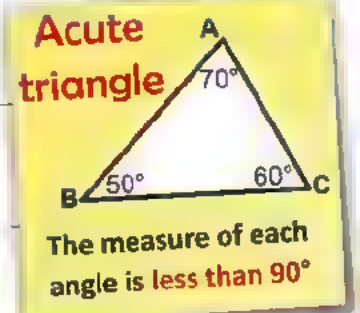
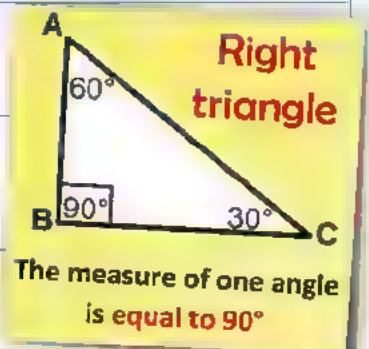
Choose	
259	<p>The area of the opposite rectangle = _____ square units.</p> <p>A. 15 B. 18</p> <p>C. 20 D. 24</p>
260	<p>Area of rectangle = _____</p> <p>A. $L + W$ B. $L \times W$ C. $L \div W$ D. $(L + W) \times 2$</p>
261	<p>Area of rectangle = _____ $\times w$.</p> <p>A. l B. w C. h D. base area</p>
262	<p>The area of rectangle whose dimensions are $\frac{1}{3}$ m and $\frac{1}{4}$ m is _____</p> <p>A. $\frac{1}{12} \text{ m}^2$ B. $\frac{3}{4} \text{ m}^2$ C. $\frac{1}{12} \text{ cm}^2$ D. $\frac{1}{12} \text{ m}$</p>
263	<p>The area of rectangle of length $\frac{2}{3}$ cm and width $\frac{1}{4}$ cm is _____ cm^2</p> <p>A. $\frac{11}{12}$ B. $\frac{1}{6}$ C. $\frac{5}{12}$ D. $\frac{3}{8}$</p>
264	<p>The area of rectangle of dimensions $5\frac{1}{2}$ meters and $2\frac{1}{2}$ meters is _____</p> <p>A. $13\frac{3}{4} \text{ m}$ B. 8 m C. 8 m^2 D. $13\frac{3}{4} \text{ m}^2$</p>
265	<p>The area of rectangle of length $\frac{3}{4}$ cm and width $\frac{2}{5}$ cm is _____ cm^2</p> <p>A. $\frac{1}{4}$ B. $\frac{5}{9}$ C. $\frac{3}{10}$ D. $\frac{2}{3}$</p>
266	<p>The area of rectangle of dimensions $7\frac{1}{2}$ meters and $2\frac{1}{5}$ meters is _____ m^2</p> <p>A. $5\frac{3}{10}$ B. $14\frac{3}{10}$ C. $9\frac{7}{10}$ D. $16\frac{1}{2}$</p>
267	<p>The area of rectangle of dimensions $\frac{2}{5}$ m and $\frac{1}{3}$ m <input type="radio"/> The area of rectangle of length $\frac{3}{8}$ m and width $\frac{1}{5}$ m</p> <p>A. $>$ B. $<$ C. $=$</p>



Types of triangles according to measure of angles

Choose


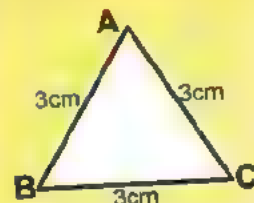
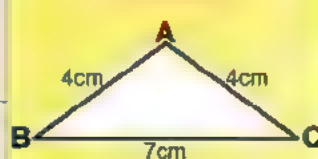
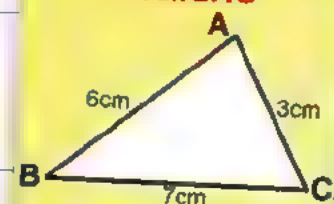
- 268 $50^\circ, 70^\circ$ and 60° are the measures of the angles of _____ triangle.
A. an obtuse-angled B. a right-angled C. an acute-angled
- 269 If $m(\angle X) = 40^\circ$, $m(\angle Y) = 90^\circ$ and $m(\angle Z) = 50^\circ$, then the triangle is _____ angled triangle.
A. Acute B. Right C. Obtuse
- 270 The triangle whose measures of angles are _____ is an acute triangle.
A. $110^\circ, 20^\circ, 50^\circ$ B. $45^\circ, 45^\circ, 90^\circ$
C. $70^\circ, 80^\circ, 30^\circ$ D. $90^\circ, 80^\circ, 10^\circ$
- 271 The triangle whose measures of angles are _____ is an obtuse triangle.
A. $30^\circ, 100^\circ, 50^\circ$ B. $30^\circ, 60^\circ, 90^\circ$
C. $70^\circ, 80^\circ, 30^\circ$ D. $50^\circ, 80^\circ, 50^\circ$
- 272 $\triangle XYZ$, $m(\angle X) = 40^\circ$, $m(\angle Y) = 90^\circ$ and $m(\angle Z) = 50^\circ$, then the triangle XYZ is _____ triangle.
A. acute B. obtuse C. right
- 273 In $\triangle ABC$, $m(\angle A) = 130^\circ$, $m(\angle B) = m(\angle C) = 25^\circ$, then the triangle ABC is _____ triangle.
A. acute B. obtuse C. right
- 274 $\triangle ABC$, $m(\angle A) = 30^\circ$, $m(\angle B) = 100^\circ$ and $m(\angle C) = 50^\circ$, then the triangle ABC is _____ triangle.
A. acute B. obtuse C. right
- 275 $\triangle EFG$, $m(\angle E) = 55^\circ$, $m(\angle F) = 35^\circ$ and $m(\angle G) = 90^\circ$, then the triangle EFG is _____ triangle.
A. acute B. obtuse C. right
- 276 $\triangle ABC$, $m(\angle A) = 46^\circ$, $m(\angle B) = 38^\circ$ and $m(\angle C) = 96^\circ$, then the triangle ABC is _____ triangle.
A. acute B. obtuse C. right
- 277 Any triangle has at least _____ acute angles.
A. 2 B. 3 C. 1 D. 0
- 278 The opposite triangle is _____
A. acute B. right
C. obtuse D. equilateral



Types of triangles according to lengths of sides

Choose

- 279 The triangle whose all sides are equal in length is called _____ triangle.
A. acute B. obtuse C. right
- 280 There are two equal sides only in the _____ triangle.
A. acute B. obtuse C. right
- 281 The triangle whose side lengths are _____ is isosceles triangle.
A. 4, 5, 3 cm B. 4, 4, 5 cm C. 3, 5, 6 cm D. 2, 3, 4 cm





282	The opposite triangle is A. equilateral B. isosceles C. scalene D. obtuse		Equilateral  All sides are equal
283	The triangle whose side lengths are _____ is an equilateral triangle. A. 7 cm , 6 cm , 5 cm B. 5 cm , 7 cm , 5 cm C. 4 cm , 4 cm , 4 cm D. 8 cm , 8 cm , 3 cm		
284	In the equilateral triangle the side lengths are _____ A. 4 , 5 , 3 cm B. 4 , 4 , 5 cm C. 4 , 4 , 4 cm D. 3 , 5 , 6 cm		
285	The triangle whose side lengths are _____ is isosceles triangle. A. 4 , 5 , 3 cm B. 4 , 4 , 5 cm C. 3 , 5 , 6 cm D. 2 , 3 , 4 cm		isosceles  Two sides are equal
286	In the triangle ABC , AB = BC = 5 cm. , AC = 3 cm. , then the triangle is _____ A. equilateral. B. isosceles. C. scalene.		
287	If AB = BC = AC , then the triangle ABC is _____ triangle. A. Equilateral B. Isosceles C. Scalene		
288	The triangle whose side lengths are _____ is an isosceles triangle. A. 7 cm , 7 cm , 7 cm B. 5 cm , 7 cm , 5 cm C. 4 cm , 5 cm , 3 cm D. 8 cm , 6 cm , 9 cm		
289	The triangle whose side lengths are 8 cm , 6 cm and _____ cm is called scalene triangle A. 8 B. 6 C. 7		Scalene  Different side lengths
290	In the triangle ABC , AB = BC = 5 cm. , AC = 3 cm. , then the triangle is A. equilateral B. isosceles. C. scalene.		
291	The triangle whose all sides are different in lengths is called _____ A. Scalene B. Isosceles C. Equilateral		













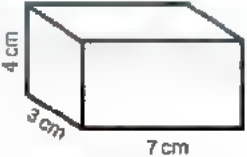

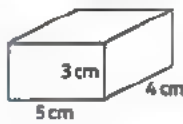
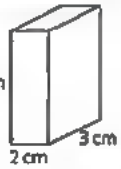


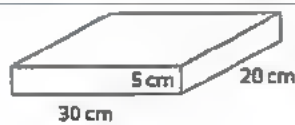
Coordinate plane and ordered pairs

Choose	
292	The _____ is called the origin point. A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (0 , 0)
293	The X-coordinate of the origin point is _____ A. 0 B. 1 C. 2 D. 3
294	The X-coordinate in ordered pair (3 , 2) is _____ A. 3 B. 2 C. 5 D. 6
295	Which of the following points located on Y-axis ? A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (3 , 0)

296	The point (0, 3) lies on _____ A. X-axis B. Y-axis C. Origin point
297	The point (5, 0) lies on _____ A. X-axis B. Y-axis C. Origin point
298	The X-coordinate of (2, 5) is A. 2 B. 5 C. 10 D. 0
299	The y-coordinate in the ordered pair (1, 8) is _____ A. 1 B. 8 C. 1 + 8 D. 8 - 1
300	The y-coordinate of (0, 7) is _____ A. 0 B. 7 C. 70 D. 1
301	The origin point is _____ A. (1, 0) B. (0, 1) C. (0, 0) D. (1, 1)
302	The point _____ lies on X-axis. A. (0, 5) B. (1, 5) C. (5, 1) D. (5, 0)
303	Which of the following points located on y-axis? A. (1, 0) B. (0, 1) C. (1, 1) D. (7, 0)

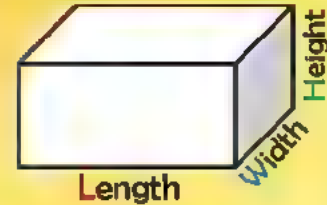
The volume

Choose	
304	Number of horizontal layers of  is - A. 4 B. 2 C. 3 D. 24
305	The cuboid has 6 horizontal layers and 2 cube units in each layer, then its volume = _____ cube units A. 8 B. 12 C. 4 D. 3
306	A cuboid has 4 horizontal layers and 5 cube units in each layer, then its volume = _____ cube units. A. 9 B. $\frac{5}{4}$ C. $\frac{4}{5}$ D. 20
307	If number of vertical layers in a cuboid is 4 layers and each layer has 10 cube units, then its volume = _____ cube units. A. $10 + 4$ B. $10 - 4$ C. $10 \div 4$ D. 10×4
308	Number of horizontal layers in  is _____ layers. A. 4 B. 3 C. 2 D. 1
309	 has _____  A. 4 B. 7 C. 11 D. 12

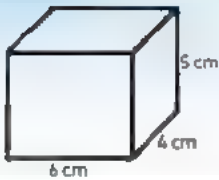
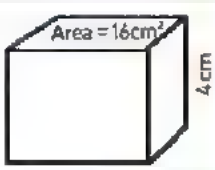

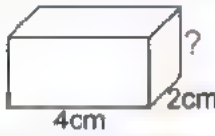
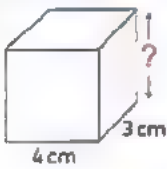


310	 has _____ 			
	A. 4	B. 8	C. 10	D. 2
311	The cuboid  has _____ edges			
	A. 14	B. 8	C. 20	D. 12
312	 has _____ 			
	A. 3	B. 4	C. 5	D. 6
313	Volume of  is _____ cube units			
	A. 8	B. 12	C. 24	D. 10
314	Volume of  equals _____ 			
	A. $[3+3] \times 2$	B. $[3+2] \times 3$	C. $3 \times 2 \times 3$	D. $3+2+3$
315	Which of the following has different volume ?			
	A. 	B. 	C. 	D. 
316	Volume of opposite cuboid = _____ cm^3			
	A. 84	B. 49	C. 14	D. 7
				
317	The volume of the opposite solid = _____ cm^3			
	A. 17	B. 170	C. 120	D. 140
				
318	Which of the following has the greatest volume ?			
	A. 	B. 	C. 	D. 
319	The volume of  is _____ cm^3			
	A. 3,000	B. 300	C. 30	D. 30,000



Rectangular prism (Cuboid)



$$\text{Volume} = L \times W \times H$$

320	Volume of opposite cuboid = _____ cm^3 A. 15 B. 120 C. $\frac{6}{5 \times 4}$ D. $6 + 5 - 4$	
321	Cuboid of length 5 m, width 2 m and height 3 m, then its volume = _____ A. 30 cm^3 B. 10 cm^3 C. 12 cm^3 D. 30 m^3	
322	Capacity of water can be poured in a cuboid vessel of inner dimensions 30 cm, 20 cm and 10 cm equals _____ cm^3 A. 60 B. 6,000 C. 5,000 D. 4,000	
323	Volume of opposite solid is _____ cm^3 A. 4 B. 20 C. 12 D. 64	
324	Volume of opposite solid is _____ cm^3 A. 36 B. 360 C. 122 D. 46	
325	Volume of cuboid = 60 cm^3 and base area = 20 cm^2 , then its height = _____ cm A. 1200 B. 80 C. 3 D. 40	
326	Length of cuboid = _____ A. $l \times w \times h$ B. $\frac{\text{volume}}{w \times h}$ C. $\frac{\text{base area}}{h}$ D. $w \times h$	
327	The volume of the opposite figure is 24 cm^3 then the missing dimension is _____ A. 3 B. 6 C. 8 D. 2	
328	Length of the missing dimension in the opposite figure its volume 48 cm^3 is _____ cm. A. 2 B. 3 C. 4 D. 5	
329	The missing dimension of  is _____ A. 5 cm B. 5 cm^3 C. 2 cm^3 D. 8 cm	
Complete		
330	Number of cube units of  is _____	

Base Area

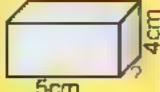
Height


Volume = Base Area \times H

The missing dimension

The volume of the opposite cuboid is 40 cm^3 , then the missing dimension is

$W = \frac{V}{L \times H} = \frac{40}{5 \times 4} = 2 \text{ cm}$





331	Rectangular prism has 2 horizontal layers and each layer has 6 cube units , then its volume = cube units .
332	Volume of cuboid = _____ × Height
333	Cuboid of base area 16 cm^2 and height 3 cm , then its volume = _____ cm^3
334	Volume of cuboid = _____ × _____ × _____
335	Volume of cuboid is 40 cm^3 , its length 5 cm and width 4 cm, then its height = _____ cm

Converting time

Choose

336	2 hours = _____ minutes A. 90 B. 120 C. 20 D. 130
337	3 hours = _____ minutes A. 60 B. 72 C. 48 D. 180
338	$1\frac{1}{4}$ hour = _____ minutes A. 90 B. 135 C. 80 D. 75
339	$1\frac{1}{3}$ hours = _____ minutes A. 80 B. 60 C. 120 D. 140
340	$1\frac{1}{2}$ hour = _____ minutes A. 90 B. 120 C. 80 D. 150
341	1 minute = _____ seconds A. 90 B. 20 C. 30 D. 60
342	90 seconds = _____ minutes A. $\frac{1}{2}$ B. $1\frac{1}{4}$ C. 2 D. $1\frac{1}{2}$
343	120 seconds = _____ minutes A. $\frac{1}{2}$ B. 2 C. 1 D. $2\frac{1}{4}$
344	150 minutes = _____ hours and _____ minutes A. 1 , 30 B. 1 , 50 C. 3 , 30 D. 2 , 30
345	90 minutes = _____ hours and _____ minutes A. 3 , 30 B. 1 , 50 C. 1 , 30 D. 2 , 30
346	$2\frac{1}{4}$ hour = _____ minutes A. 120 B. 140 C. 80 D. 135
347	1 day = _____ hours A. 28 B. 48 C. 24 D. 72
348	$1\frac{1}{2}$ day = _____ hours A. $\frac{2}{3}$ B. 24 C. 36 D. $\frac{3}{2}$
349	1 year = _____ months A. 6 B. 12 C. 10 D. 60
350	2 years = _____ months A. 42 B. 48 C. 24 D. 12

1 hour = 60 minutes



$\frac{1}{4}$ hour = 15 minutes



$\frac{1}{3}$ hour = 20 minutes



$\frac{1}{2}$ hour = 30 minutes



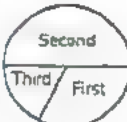
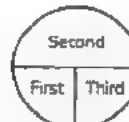

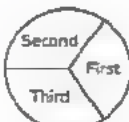
351	$1\frac{1}{2}$ year = _____ months A. 18 B. 6 C. 24 D. 12
352	$\frac{1}{4}$ year = _____ months. A. 3 B. 4 C. 6 D. 12
353	30 months = _____ years + _____ months A. 1, 6 B. 2, 6 C. 1, 10 D. 2, 4
Complete	
354	$\frac{2}{3}$ minute = _____ seconds
355	150 seconds = _____ minutes
356	80 minutes = _____ hour
357	$7\frac{1}{10}$ minutes = _____ minutes and _____ seconds
358	$6\frac{1}{2}$ years = _____ years and _____ months
359	$4\frac{3}{4}$ hours = _____ hours and _____ minutes
360	75 seconds = _____ minute



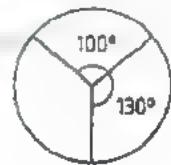
Final revision

A	Complete each sentence
361	The mixed number $4\frac{1}{3}$ can be regrouped as A. $\frac{13}{4}$ B. $3\frac{1}{4}$ C. $3\frac{4}{3}$ D. $4 + \frac{1}{3}$
362	$\frac{3}{4} + \frac{1}{2} =$ _____ A. $\frac{4}{6}$ B. $\frac{3}{8}$ C. $\frac{1}{4}$ D. $1\frac{1}{4}$
363	$\frac{19}{5}$ is equivalent to _____ A. $3\frac{3}{5}$ B. $4\frac{1}{5}$ C. $3\frac{5}{5}$ D. $3\frac{4}{5}$
364	$2\frac{1}{3}$ hour = _____ minutes A. 120 B. 140 C. 80 D. 135
365	If $2\frac{1}{4} - n = \frac{3}{4}$, then $n =$ _____ A. 2 B. $\frac{3}{4}$ C. 3 D. $1\frac{1}{2}$
366	$\frac{3}{4} - \frac{5}{8} =$ _____ A. $\frac{1}{4}$ B. $\frac{1}{8}$ C. $\frac{3}{8}$ D. $\frac{5}{8}$
367	Which of the following points located on y-axis? A. (1, 0) B. (0, 1) C. (1, 1) D. (3, 0)

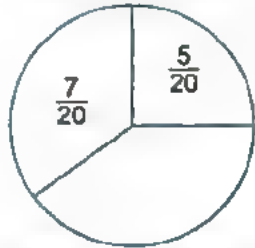
368	The triangle of side lengths are 5 cm , 6 cm , 7 cm is called _____ triangle. A. Equilateral B. Isosceles C. Scalene
369	The cylinder has _____ bases. A. zero B. 1 C. 2 D. 3
370	$2\frac{3}{5} + \text{_____} = 3\frac{1}{4}$ A. $\frac{13}{20}$ B. $1\frac{4}{5}$ C. $1\frac{2}{5}$ D. $1\frac{1}{4}$
371	The cube has _____ faces. A. 4 B. 6 C. 8 D. 12
372	If $\frac{1}{5} \div a = \frac{1}{10}$, then a = _____ A. $\frac{1}{2}$ B. 5 C. $\frac{1}{5}$ D. 2
373	The measure of each angle in square is A. 45° B. 90° C. 100° D. 180°
374	 A. $\frac{1}{3} + \frac{1}{3}$ B. $\frac{1}{2} + \frac{1}{2}$ C. $\frac{1}{2} + \frac{1}{3}$ D. $3 + 2$
375	$\frac{1}{5} \div 4 = \text{_____}$ A. $\frac{4}{5}$ B. $\frac{5}{4}$ C. 20 D. $\frac{1}{20}$
376	Number of faces of cube <input type="radio"/> Number of faces of cuboid. A. > B. < C. =
377	If $\frac{1}{2} + a = \frac{7}{8}$, then a = _____ A. $\frac{6}{8}$ B. $\frac{3}{8}$ C. $\frac{8}{10}$ D. $1\frac{1}{8}$
378	The pentagon has _____ sides. A. 3 B. 4 C. 5 D. 6
379	90 seconds = _____ minutes. A. 90 B. $1\frac{1}{4}$ C. $1\frac{1}{2}$ D. $1\frac{1}{3}$






380	The fraction $\frac{10}{15}$ is equivalent to A. $\frac{4}{6}$ B. $\frac{2}{5}$ C. $1\frac{1}{2}$ D. $\frac{20}{33}$								
381	The _____ is a polygon with 6 sides. A. quadrilateral B. pentagon C. hexagon D. square								
382	Which of the following is equal to $4 \times 2\frac{1}{2}$? A. $8\frac{1}{2}$ B. 4 C. $\frac{10}{2}$ D. 10								
383	$\frac{8}{11} \times 2.5 =$ _____ A. $\frac{16}{11}$ B. $1\frac{9}{11}$ C. $\frac{11}{20}$ D. $1\frac{2}{11}$								
384	The triangle whose side lengths are _____ is an equilateral triangle. A. 7 cm, 6 cm, 5 cm B. 5 cm, 7 cm, 5 cm C. 4 cm, 4 cm, 4 cm D. 8 cm, 8 cm, 3 cm								
385	<p>The following table shows the fractions of chicken production for three farms during October:</p> <table><tr><td>The farm</td><td>First</td><td>Second</td><td>Third</td></tr><tr><td>The fractions</td><td>$\frac{1}{4}$</td><td>$\frac{1}{2}$</td><td>_____</td></tr></table> <p>, then the representation of these data by the pie chart is _____</p> <div><div><p>A.</p></div><div><p>B.</p></div><div><p>C.</p></div><div><p>D.</p></div></div>	The farm	First	Second	Third	The fractions	$\frac{1}{4}$	$\frac{1}{2}$	_____
The farm	First	Second	Third						
The fractions	$\frac{1}{4}$	$\frac{1}{2}$	_____						
386	The _____ has five vertices and five faces. A. cone B. cuboid C. square pyramid D. sphere								
387	If $\frac{5}{8} = \frac{x}{40}$, then $x =$ _____ A. 37 B. 25 C. 40 D. 5×8								
388	The sphere has _____ edges. A. 3 B. 2 C. 1 D. zero								
389	If $3\frac{5}{m}$ is about 4, then m may be _____ A. 6 B. 8 C. 10 D. 12								
390	$1\frac{5}{6} \times \frac{5}{6}$ is _____ $1\frac{5}{6}$ A. less than B. equal to C. greater than								

391	$\frac{1}{3} \div 3 \square \frac{1}{3} - \frac{2}{9}$ A. < B. = C. >
392	Which of the following is equivalent to $\frac{3}{7}$? A. $2\frac{1}{3}$ B. $\frac{13}{17}$ C. $\frac{9}{21}$ D. $\frac{6}{10}$
393	The square pyramid has _____ triangle faces. A. 4 B. 5 C. 7 D. 8
394	If $5\frac{7}{f}$ is slightly greater than $5\frac{1}{2}$, then f may be _____ A. 13 B. 7 C. 5 D. 57
395	The volume of cuboid of dimensions 17 cm , 13 cm and 11 cm equal _____ cm^3 A. 2341 B. 2431 C. 2314 D. 2341
396	$12 \div 8 = 1\frac{1}{\quad}$ A. 2 B. 3 C. 4 D. 5
397	In the opposite figure , the measure of the central angle of the colored circular sector equals _____ ° A. 360 B. 100 C. 130 D. 230
398	$\frac{1}{4}$ year = _____ months. A. 3 B. 4 C. 6 D. 12
399	The cuboid has 6 horizontal layers and 2 cube units in each layer , then its volume = _____ cube units A. 8 B. 12 C. 4 D. 3
400	$\frac{2}{3} \times \frac{3}{8} \times \frac{8}{9} =$ _____ A. $\frac{1}{3}$ B. $\frac{2}{9}$ C. $\frac{13}{20}$ D. $\frac{2}{17}$
401	The _____ is called the origin point. A. (1, 0) B. (0, 1) C. (1, 1) D. (0, 0)
402	$3\frac{1}{2} - 1\frac{2}{3} =$ _____ A. $1\frac{5}{6}$ B. $6\frac{1}{5}$ C. $5\frac{1}{6}$ D. $1\frac{6}{5}$
403	120 seconds = _____ minutes A. 1 B. 2 C. 3 D. 4



Very Good

404	Which of the following points located on y-axis ? A. (1, 0) B. (0, 1) C. (1, 1) D. (7, 0)
405	Area of rectangle = _____ A. $L + W$ B. $L \times W$ C. $L \div W$ D. $(L + W) \times 2$
406	If $8\frac{3}{C}$ is slightly less than $8\frac{1}{2}$, then C may be _____ A. 7 B. 4 C. 2 D. 15
407	$\frac{1}{5} \div 4 =$ _____ A. $\frac{4}{5}$ B. $\frac{5}{4}$ C. 20 D. $\frac{1}{20}$
408	The number of thirds in one is _____ A. 1 B. 2 C. 3 D. $\frac{1}{3}$
409	$5\frac{1}{6} + 2\frac{4}{5}$ is estimate as _____ A. $5 + 3$ B. $6 + 3$ C. $5 + 2$ D. $6 + 4$
410	The triangle whose side lengths are _____ is isosceles triangle. A. 4, 5, 3 cm B. 4, 4, 5 cm C. 3, 5, 6 cm D. 2, 3, 4 cm
B Complete each of the following	
411	_____ $+ 1\frac{5}{7} = 3\frac{5}{14}$
412	$1\frac{1}{5} \times$ _____ $= 1$
413	In the opposite figure: The fraction of the shaded pie chart = _____ 
414	$5 - \frac{1}{2} - \frac{1}{3} =$ _____
415	$\frac{1}{4}$ year = _____ months.
416	$7\frac{1}{2} \times \frac{1}{15} =$ _____
417	On the grid, the x-coordinate of (5, 7) is _____
418	The LCM of the denominators of the fractions $\frac{1}{3}$ and $\frac{5}{12}$ is _____
419	The shape which has 0 faces, 0 edges and 0 vertices is _____

420	If $x + 5\frac{5}{6} = 9\frac{1}{12}$, then $x =$ _____	
421	The cuboid  has _____ 	
422	Height of cuboid = _____ + _____	
423	$\frac{10}{3} \times \frac{3}{10} =$ _____	
424	$\frac{1}{2} \times \frac{\quad}{\quad} = \frac{3}{8}$	
425	$\frac{2}{5} - \frac{1}{4} =$ _____	
426	If $5 \div a = 10$, then $a =$ _____	
427	If $2\frac{1}{7} = \frac{x}{7}$, then $x =$ _____	
428	$\frac{1}{2} \times \frac{\quad}{\quad} = \frac{3}{8}$	
429	$2\frac{1}{4} + 2\frac{1}{4} =$ _____	
430	In $\triangle ABC$, $AB = BC = 7$ cm and $AC = 4$ cm, then the triangle is _____	
431	$\frac{1}{2} \times \frac{3}{5} =$ _____	
432	Volume of cuboid = _____ \times height.	
433	$3\frac{1}{2}$ years = _____ years and _____ months	
434	Simplest form of $\frac{16}{24}$ is _____	
435	$1\frac{1}{2} \times 2\frac{2}{3} =$ _____	
436	$7\frac{3}{8} + \frac{\quad}{\quad} = 10\frac{1}{4}$	
C Solving story problems		
437	Fatma feeds her cat $\frac{1}{8}$ of a kilogram of cat food each day. How many days will 4 kg of cat food last ?	
438	Jomana likes chocolate. One day she bought a chocolate and ate $\frac{2}{9}$ of it in the morning and $\frac{2}{3}$ in the evening. How much part of the chocolate has she eaten ?	
439	Hany collected $5\frac{1}{4}$ kilograms of honey. He gave his brother $2\frac{3}{7}$ kilograms of them. How many kilograms are left ?	



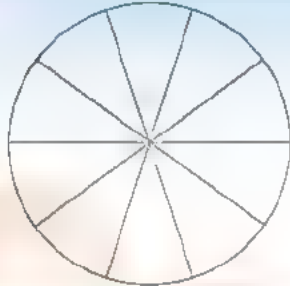
440	If the price of each book is $10\frac{1}{2}$ L.E. Find the price of 8 books.	
441	The price of each pen is $2\frac{1}{2}$ L.E. Find the price of 6 pens.	
442	The price of 9 notebooks is 55 L.E. Find the price of each book .	
443	Nermin took $2\frac{1}{3}$ hours to paint a table and $1\frac{1}{4}$ hours to paint a chair. How much time did she take in all ?	
444	How many thirds are in the number 7 ?	
445	How many fourths in the number 3 ?	
446	How many $\frac{1}{4}$ cup are there in 7 cups of chocolate ?	
447	How many sevenths are in the number 5 ?	
448	If the price of 9 pens is 77 L.E. Find the price of each pen.	
449	$\frac{3}{4}$ of the teachers staff are male. How many of the staff are female ?	
450	Martin spends $\frac{1}{3}$ of his money to buy food and $\frac{1}{2}$ of it to buy toys. What fraction does the left money represent ?	
451	Youssef's dad said he will give him $7\frac{1}{2}$ L.E if he works one hour. How much will he give him for 3 hours and 15 minutes ?	
452	Marwan studied math for $2\frac{1}{2}$ hours and science for 90 minutes. How many hours did Marwan study in all ?	

453	<p>A juice can is in the shape of cuboid , its base is square shaped of side length 5 cm. and its height is 10 cm</p> <p>Calculate the volume of juice can.</p>	
454	<p>Ahmed had $10\frac{1}{2}$ L.E. in his pocket and $15\frac{3}{4}$ L.E. in his bank.</p> <p>How much money did he have ?</p>	
455	<p>Victor has 7 liters of mango juice. If he drinks $\frac{1}{4}$ Litre of juice each day.</p> <p>How many days will it take him to finish all the juice ?</p>	
456	<p>If the price of 8 pencils is 60 pounds. Find the price of each pencil.</p>	
457	<p>Karim walked $2\frac{1}{5}$ km and Sameh walked $1\frac{1}{3}$ km more.</p> <p>What distance that Sameh walked ?</p>	
458	<p>A cuboid whose volume is 8000 cm^3 and the length of its base is 25 cm and the width of its base is 16 cm Find the height of the cuboid.</p>	
459	<p>A house has a door that is $1\frac{1}{2}$ m wide and $2\frac{1}{2}$ m long.</p> <p>What is the area of the door in square meters ?</p>	
460	<p>Nagwa bought $2\frac{2}{3}$ liters of mango juice for $8\frac{3}{8}$ L.E. for each liter.</p> <p>How much money did she pay ?</p>	
461	<p>Youssef walked $1\frac{1}{2}$ km , Ahmed walked $\frac{1}{3}$ km more than Youssef</p> <p>How many km did Ahmed walk ?</p>	
462	<p>Sohila likes chocolate. One day , she bought a chocolate and ate $\frac{1}{3}$ of it Next day, she ate $\frac{1}{5}$ of it. Find the fraction of the left part.</p>	
463	<p>The opposite figure shows the percentages of sales of different types of books. Complete :</p> <p>1. The sales fraction of science books is _____</p> <p>2. The least sales fraction is in _____</p>	

464 The following table shows the fractions of the number of hours that Marwa studied in different subjects in a week.

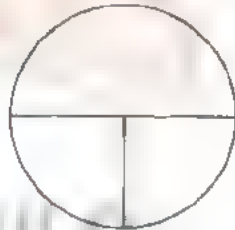
Subject	Arabic	Maths	Science	English
Fraction	$\frac{1}{10}$	$\frac{2}{5}$	$\frac{1}{5}$	$\frac{3}{10}$

Represent these data by the opposite pie chart.

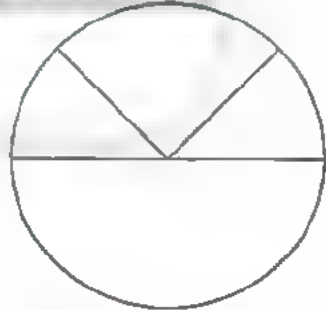


465 The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

Sport	Football	Basketball	Volleyball
Number of students	20	10	10

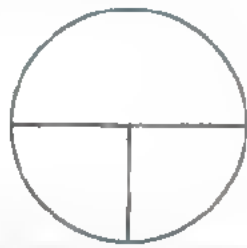


466 An employee spends his salary as follows.
 L.E. 200 for clothes.
 L.E. 800 for food.
 L.E. 400 for transportation and medicine.
 L.E. 200 for renting an apartment.
 Graph that data on the opposite pie chart.



467 The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

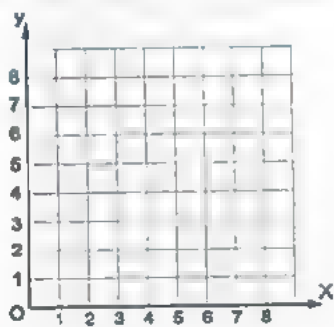
Sport	Football	Basketball	Volleyball
Number of students	20	10	10



468 In the opposite coordinate plane :

1. Graph the figure ABCD where A (2, 8) , B (3, 4) , C (8, 4) and D (7, 8)

2. What is the length of \overline{AD} ?



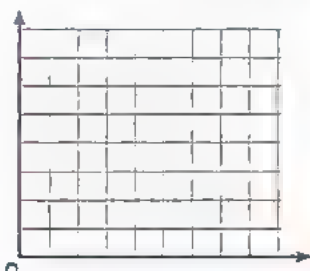
469 a. Plot the points on the coordinate grid.

A (3, 2) B (3, 5)

C (6, 5) D (6, 2)

b. Connect the points in order.

What polygon did you create ?



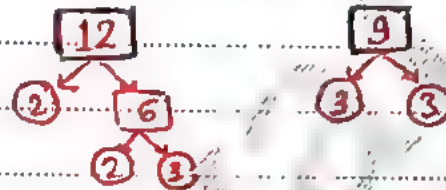
Lesson [11]: Finding Like denominators
using L.C.M

☆ بلاد قبل الترم ما يخلص
نبدأ الكتابة من السوية تعالىا نفكر بين ايه L.C.M

* Find L.C.M to 12 and 9 ?

$$12 = 2 \times 2 \times 3$$

$$9 = 3 \times 3$$

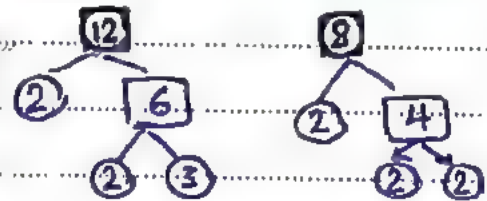


$$L.C.M = 2 \times 2 \times 3 \times 3 = 36$$

• Find L.C.M to 12 and 18 ?

$$12 = 2 \times 2 \times 3$$

$$18 = 2 \times 3 \times 3$$



$$L.C.M = 2 \times 2 \times 3 \times 3 = 36$$

* انت بتفكرنا بالكلام ده ليه يا ماستر ؟
اسميا انت برضه اسميا حضرتك هقولك برضه يا سيدى قرة
رة اول سؤال من اول Exercise من الجايز

① Change each pair of unlike denominator into like fractions using L.C.M of unlike denominators.
حول باستخدام L.C.M الى Like denominators

a) $\frac{5}{12}$ and $\frac{7}{18}$

المطلوب قول ال frac. دى

deno. ليايقض ال frac. ل

$$\frac{15}{36}$$

12x3

$$\frac{14}{36}$$

18x2



$$12 = 2 \times 2 \times 3$$

$$18 = 2 \times 3 \times 3$$

$$L.C.M = 2 \times 2 \times 3 \times 3 = 36$$

Unit 7 L:1

Finding Like deno.
by using L.C.M

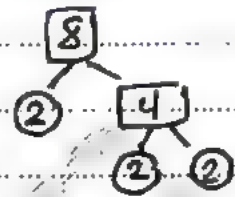
b) $\frac{7}{6}$ and $\frac{3}{8}$

لوما فقتش حاجة من لثال الى فات

ركز من الى جاي دة اول حاجة نبص على الرقمين الى تحت

$$6 = 2 \times 3$$

$$8 = 2 \times 2 \times 2$$



$$L.C.M = 2 \times 2 \times 2 \times 3 = 24$$

عاوزين نحول كل رقم مع 6 و 8 الى 24 ازاى

$$24 = 4 \times 6$$

$$24 = 3 \times 8$$

$$24 = 3 \times 8$$

$$24 = 3 \times 8$$

الخطوة الأخيرة

$$\frac{7 \times 4}{6 \times 4} = \frac{28}{24}$$

$$\frac{3 \times 3}{8 \times 3} = \frac{9}{24}$$

c) $\frac{2}{3}$ and $\frac{4}{7}$

$$\frac{2 \times 7}{3 \times 7} \text{ and } \frac{4 \times 3}{7 \times 3}$$

$$3 = 3 \times 1$$

$$7 = 1 \times 7$$

$$\frac{14}{21}$$

and

$$\frac{12}{21}$$

$$L.C.M = 3 \times 1 \times 7 = 21$$

d) $\frac{7}{9}$ and $\frac{11}{12}$

$$9 = 3 \times 3$$

$$12 = 3 \times 2 \times 2$$

$$\frac{7 \times 4}{9 \times 4}$$

$$\frac{11 \times 3}{12 \times 3}$$

$$L.C.M = 3 \times 3 \times 2 \times 2 = 36$$

$$\frac{28}{36}$$

and

$$\frac{33}{36}$$

الجزء الثاني ليس في الجزء الأول

• Equivalent Fractions:

it is have the same value with different terms

$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{10}{20} = \frac{100}{200} = \dots$$

• To find equivalent fractions:

multiply or divide the two terms by the same number except 1

طبعاً لا تقسم بـ 1 ولا تضرب بـ 1

2 لتبسيط

أبسطه لك لو الرقم كان صغير وكبير فقل \times

ولو الرقم كان كبير وصغير فقل \div

يا سلام!! بص

A) $\frac{1}{5} \xrightarrow{\times 2} \frac{2}{10} = \frac{3}{15} = \frac{4}{20}$

$$\frac{1}{5} \xrightarrow{\times 3} \frac{3}{15}$$

$$\frac{1}{5} \xrightarrow{\times 5} \frac{5}{25}$$

B) $\frac{20}{24} \xrightarrow{\div 4} \frac{5}{6}$

$$\frac{20}{24} \xrightarrow{\div 2} \frac{10}{12}$$

* إيه الموشة دي يا ماستر السؤال بيصن إزاي؟

أعدى وصلني النبي بص السؤال أهو

• Find two equivalent fractions to:

1) $\frac{2}{3}$

$$\frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

$$\frac{2 \times 5}{3 \times 5} = \frac{10}{15}$$

$$\frac{2}{3} = \frac{4}{6} = \frac{10}{15}$$

② $3\frac{5}{10}$ إيد ٥ X رجله + راسه

$$3\frac{5}{10} = \frac{35}{10}$$

$$\frac{35 \times 2}{10 \times 2} = \frac{70}{20}$$

$$\frac{35 \div 5}{10 \div 5} = \frac{7}{2}$$

$$\therefore 3\frac{5}{10} = \frac{70}{20} = \frac{7}{2}$$



③ $\frac{30}{60}$

$$\frac{30 \div 10}{60 \div 10} = \frac{3}{6}$$

$$\frac{30 \div 5}{60 \div 5} = \frac{6}{12}$$

$$\frac{30}{60} = \frac{3}{6} = \frac{6}{12}$$

ماكينة كلبوطة

بمناجك يا معلم العدد الى تنقله X أو ÷
الشرط الى تنقله X أو ÷ فقوم يبقى هو بقى الى تنقل



• Put the following fractions in the simplest form: صيغ في أبسط صورة

① $\frac{8}{40} \div 8 = \frac{1}{5}$

② $\frac{15}{30} \div 5 = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$

③ $2\frac{8}{24}$

$$2\frac{8 \div 8}{24 \div 8}$$

$$2\frac{1}{3}$$



④ $3\frac{6}{18}$

$$3\frac{6 \div 6}{18 \div 6}$$

$$3\frac{1}{3}$$

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* Send to Prof *

(1) Complete the following:

a) $\frac{3}{5} = \frac{9}{\dots}$

b) $\frac{7}{21} = \frac{1}{\dots}$

c) $\frac{5}{8} = \frac{\dots}{48}$

d) $\frac{2}{7} = \frac{6}{\dots}$

e) $\frac{4}{12} = \frac{\dots}{36}$

f) $\frac{3}{10} = \frac{\dots}{50}$

(2) put the following fractions in the Simplest form:

a) $\frac{4}{12}$

b) $\frac{50}{90}$

c) $\frac{8}{16}$

d) $\frac{24}{36}$

e) $3\frac{6}{18}$

f) $\frac{14}{35}$

(3) Find two equivalent fractions to each fraction

a) $\frac{21}{27}$

b) $\frac{4}{5}$

c) $\frac{36}{48}$

d) $3\frac{3}{6}$

e) $\frac{35}{70}$

f) $\frac{1}{2}$

(4) Find the Smallest like denominators for the following fractions using L.C.M.:

a) $\frac{5}{12}, \frac{3}{16}$

b) $\frac{4}{9}, \frac{2}{3}$

c) $\frac{5}{6}, \frac{3}{8}$

d) $\frac{3}{5}, \frac{2}{15}$

e) $\frac{2}{6}, \frac{4}{5}$

f) $\frac{3}{4}, \frac{5}{12}$


 بلالو علیہ السلام

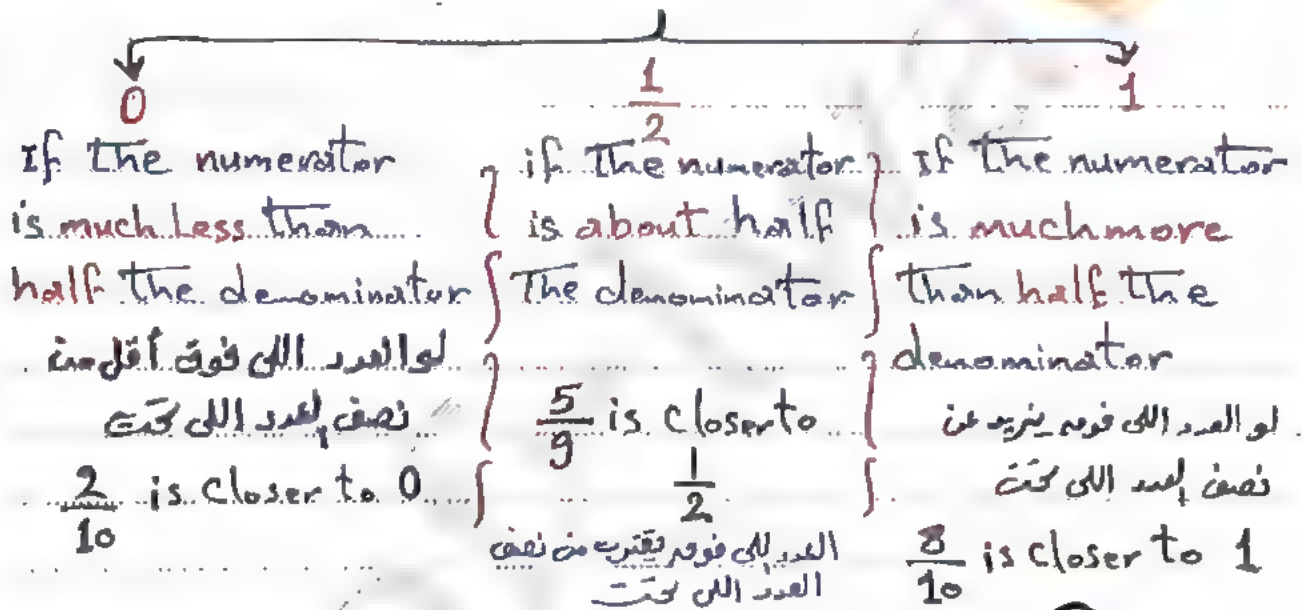
Unit 7

Lessons 2, 3

L2 Estimating Sums and Differences of Fractions

* First: Adding and Subtracting using Benchmark
[0 , $\frac{1}{2}$, 1]

Fraction is Close to:



① Complete:

$\frac{1}{6}$ is closer to

$\frac{5}{8}$ is closer to

$\frac{9}{10}$ is closer to

② Estimate using benchmarks 0, $\frac{1}{2}$, 1

① $\frac{1}{7} + \frac{8}{9} = 0 + 1 = 1$

② $\frac{1}{4} + \frac{2}{3} = 0 + 1 = 1$

$$\textcircled{3} \quad \frac{4}{9} + \frac{7}{8} = \frac{1}{2} + 1 = 1\frac{1}{2}$$

$$\textcircled{4} \quad \frac{5}{6} - \frac{7}{12} = 1 - \frac{1}{2} = \frac{1}{2}$$

$$\textcircled{5} \quad \frac{3}{4} - \frac{2}{3} = 1 - 1 = 0$$



3] صحیح باءة للسؤال دة علشان هیجمل قلق
Indicate whether the given estimate
is an overestimate or underestimate ?

* وضع ما اذا كان التقدير الحد هو تقدير بقيمة أكبر أم تقدير
بقیة أقل ؟

a. $\frac{9}{10} + \frac{2}{5}$ is about $1\frac{1}{2}$ Overestimate
لیه باءة إله شاء الله ولیه اشت Overestimate

Estimation نوع لتقدير	التقدير	القيمة الحقيقية	Fraction
over تقدير بقيمة أكبر	1	أقل من 1	$\frac{9}{10}$
over تقدير بقيمة أكبر	$\frac{1}{2}$	أقل من $\frac{1}{2}$	$\frac{2}{5}$

b. $\frac{3}{5} + \frac{6}{10}$ is about 1 Underestimate
 $\frac{1}{2}$ أكبر من $\frac{1}{2}$ أكبر من $\frac{1}{2}$

c. $\frac{1}{3} + \frac{5}{9}$ is about $\frac{1}{2}$ Underestimate
0 أكبر من $\frac{1}{2}$ أكبر من $\frac{1}{2}$

بروف حلوان

d. $\frac{2}{5} + \frac{3}{7}$ is about 1 Overestimate
 $\frac{1}{2}$ أقل من $\frac{1}{2}$ أقل من $\frac{1}{2}$

Unit 7

Lessons 2, 3

e. $\frac{9}{10} + \frac{7}{9}$ is about 2
 أكبر من 1 أكبر من 1

overestimate

f. $\frac{7}{12} + \frac{12}{11}$ is about $1\frac{1}{2}$
 أكبر من $\frac{1}{2}$ أكبر من 1

underestimate

Second: Using models to add and subtract fractions with unlike denominators

Fraction wall

دقة قص ولصق كبير صانع من شجای

(4) Kamel Says that $\frac{11}{12} - \frac{7}{10}$ will be about $\frac{1}{2}$

Fady Says $\frac{11}{12} - \frac{7}{10}$ will be close to 0

Do you agree with Kamel or Fady? why?

Sol. By using benchmark

$$\frac{11}{12} - \frac{7}{10} = 1 - \frac{1}{2} = \frac{1}{2}$$

I agree with Kamel

تعالوا نتعلم طريقة جديدة للـ

* Adding and Subtracting unlike denominators
 Fractions using models

(1) $\frac{1}{3} + \frac{5}{6} =$
 يتبني الـ equivalent يتابع واحد

Like denominators الـ

$$\frac{2}{6} + \frac{5}{6} = \frac{7}{6}$$

$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

Unit 7

Lessons 2, 3

$$\textcircled{2} \quad \frac{5}{6} - \frac{1}{2} = \dots$$

$$\frac{5}{6} - \frac{3}{6} = \frac{2}{6} \div 2 = \frac{1}{3}$$



Homework

① Estimate using benchmarks. 0, $\frac{1}{2}$, and 1

$$\textcircled{1} \quad \frac{5}{6} + \frac{3}{7}$$

$$\textcircled{2} \quad \frac{3}{8} + \frac{4}{5}$$

$$\textcircled{3} \quad \frac{9}{10} - \frac{7}{8}$$

$$\textcircled{4} \quad \frac{8}{10} + \frac{2}{5}$$

$$\textcircled{5} \quad \frac{4}{5} + \frac{2}{5}$$

$$\textcircled{6} \quad \frac{3}{7} + \frac{4}{10}$$

$$\textcircled{7} \quad \frac{2}{3} + \frac{6}{5}$$

$$\textcircled{8} \quad \frac{3}{4} - \frac{1}{3}$$

② Use your fraction wall to evaluate

$$\textcircled{1} \quad \frac{1}{3} + \frac{5}{6}$$

$$\textcircled{3} \quad \frac{4}{5} - \frac{1}{10}$$

$$\textcircled{2} \quad \frac{5}{8} + \frac{1}{4}$$

$$\textcircled{4} \quad \frac{1}{2} - \frac{2}{6}$$

③ $\frac{7}{8} + \frac{5}{9}$ is about $\frac{1}{2}$ overestimate or underestimate

④ $\frac{8}{9} + \frac{5}{11}$ is about $1\frac{1}{2}$ overestimate or underestimate

بروف حلوان



Unit 7

Lessons 4-5

Lesson 4 Adding and Subtracting

Fractions where denominator of one of them is a multiple of the other:

الدرس دة بيقولنا لو العددين الى تحت واحد منهم صغير

والثاني كبير والكي في ال Table يتابع لصغير

تخليهم ال C زي الكي (بين تحول الصغير للكي)

$$\frac{5}{8} + \frac{1 \times 2}{4 \times 2} = \frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

$$\frac{5}{6} - \frac{2 \times 2}{3 \times 2} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$$

$$\frac{2 \times 3}{7 \times 3} + \frac{19}{21} = \frac{6}{21} + \frac{19}{21} = \frac{25}{21}$$

$$\frac{7}{10} - \frac{1 \times 2}{5 \times 2} = \frac{7}{10} - \frac{2}{10} = \frac{5}{10} = \frac{1}{2}$$



Lesson 5

Adding and Subtracting unlike denominator fractions

صنعنا في الدرس دة ازاى بند (+) و (-) لل

$$\textcircled{1} \quad \frac{3 \times 3}{8 \times 3} + \frac{1 \times 8}{3 \times 8}$$

الخطوة الاولى نجيب L.C.M

للعددين الى تحت

3 و 8

$$= \frac{9}{24} + \frac{8}{24} = \frac{17}{24}$$

$$L.C.M = 8 \times 3 = 24$$

الخطوة الثانية تحول ال Fractions الى

Like denominators

نبد (+)

بدون حلوان

$$\textcircled{2} \quad \frac{7x^2}{8x^2} - \frac{1x^3}{6x^3}$$

$$9 = 3 \times 3$$

$$6 = 3 \times 2$$

$$\frac{14}{18} - \frac{3}{18}$$

$$\text{L.C.M} = 3 \times 3 \times 2 = 18$$

$$= \frac{11}{18}$$

$$\textcircled{3} \quad \frac{2 \times 8}{5 \times 8} + \frac{3 \times 5}{8 \times 5} + 1$$

$$\text{L.C.M} = 5 \times 8 = 40$$

$$\frac{16}{40} + \frac{15}{40} + \frac{40}{40} = \frac{71}{40} = 1 \frac{31}{40}$$

$$\textcircled{4} \quad 1 - \frac{1}{4} - \frac{1}{5}$$

$$\text{L.C.M} = 20$$



$$\frac{20}{20} - \frac{5}{20} - \frac{4}{20} = \frac{11}{20}$$

⑤ Who is Correct? Soliman, Seif and Samar

$$\frac{1}{12} + \frac{2}{3}$$

Soliman's Answer $\frac{9}{12}$

Seif's Answer $\frac{3}{15}$

Samar's Answer $\frac{3}{4}$

① IS Soliman Correct? why?

Yes, He rewrote the fractions with like denominators using L.C.M

② IS Seif Correct? why?

No, He added numerators and denominators.

③ IS Samar Correct? why?

Yes, She Simplified the answer.



Solving Story problems with Fractions

الفوازير

(1) Wael Spends $\frac{4}{7}$ of his money on Candy and $\frac{1}{5}$ of his money on toys and Saves the Left money? what fraction of money does Wael Save?

Answer

$$\text{Wael Spent} = \frac{4}{7} + \frac{1}{5} \quad \text{L.C.M} = 35$$



$$= \frac{20}{35} + \frac{7}{35} = \frac{27}{35}$$

$$\text{The Left} = 1 - \frac{27}{35} = \frac{35}{35} - \frac{27}{35} = \frac{8}{35}$$

(2) Nancy read $\frac{1}{3}$ of a book in the morning and $\frac{2}{5}$ of the same book in the evening, then 32 pages of the book are left without reading. what is the number of pages of the book.

Answer

$$\text{What Nancy read} = \frac{1}{3} + \frac{2}{5} = \frac{5}{15} + \frac{6}{15} = \frac{11}{15}$$

Fraction of

$$\text{Left pages} = 1 - \frac{11}{15} = \frac{15}{15} - \frac{11}{15} = \frac{4}{15}$$

prophetwan

$$\frac{4}{15} \xrightarrow{\times 8} 32$$



$$\text{Number of pages of The book} = 15 \times 8 = 120 \text{ p.}$$

(3) In The pond, $\frac{1}{3}$ of the lilies are white and

$\frac{1}{4}$ of the lilies are pink. The remaining lilies

are Blue. what fraction of the lilies are Blue?

Solution

$$\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

$$\text{Number of Blue} = 1 - \frac{7}{12} = \frac{12}{12} - \frac{7}{12} = \frac{5}{12}$$

(4) Rania uses $\frac{3}{4}$ of her monthly salary to pay for her food, rent, utilities and transportation

after these expenses, she left 1,250 L.E

what Rania's monthly salary?

ما هو مرتب المداينة المطبخ رانيا هانم ؟

Solution

She Spent = $\frac{3}{4}$ of Salary

$$\text{The left} = 1 - \frac{3}{4} = \frac{4}{4} - \frac{3}{4} = \frac{1}{4} \text{ of Sal.}$$

$$\frac{1}{4} \times 1250 = 1250$$

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$$\text{The Salary} = 4 \times 1250 = 5000 \text{ pounds}$$



والله ولا هيكنوا لولا ستر ربنا

Unit 8

Lessons 1-2-3

Lesson 1:

- Adding and Subtracting Mixed numbers with like denominators.

خذنا زوايا سنة ١٦

proper fraction
 $\frac{3}{5}$
 الصغير فهو

improper fraction
 $\frac{5}{3}$
 الكبير فهو

mixed number
 $1\frac{2}{3}$
 واضح

* نعال نتعلم حركة جديدة

$$3\frac{2}{5} = 2\frac{7}{5}$$

ايه ال حصل ؟

عباس انكسر !!

عباس ده هو ال whole يعني ال 3 انكسر يعني

نقصنا منه 1 و ال $1 = \frac{5}{5}$ طب اشنى 5

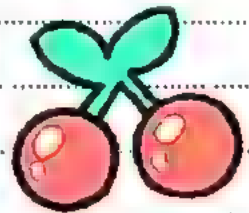
علشان مكتوب تحت 5 و اخذنا $\frac{5}{5}$ دي زودناها

على ال جنبها $\frac{2}{5}$ اصبحت $\frac{7}{5}$



$$3\frac{2}{5} = 2\frac{7}{5}$$

-1
+ $\frac{5}{5}$



طب وليه قلبت الدماغي دي يا عباس ١٩

استعجلت في السؤال ده بس هرد عليك بص

لو طابت منك نجيب دي

$$5\frac{1}{8} - 2\frac{3}{8}$$

$$(5-2) + (\frac{1}{8} - \frac{3}{8})$$

دي هتبقى 3

يكن دي لا مش هتبقى

طب هنكس ايه

اقلب الصفة

$$5\frac{1}{8} - 2\frac{3}{8} = 4\frac{9}{8} - 2\frac{3}{8}$$

$$= (4 - 2) + (\frac{9}{8} - \frac{3}{8})$$

$$= 2 + \frac{6}{8}$$

$$= 2\frac{6}{8}$$

يارب تكون وصلت

واحدة كمات

$$11\frac{1}{6} - 5\frac{5}{6}$$

يقول على ال fractions الاول

$$11\frac{1}{6} - 5\frac{5}{6} = 10\frac{7}{6} - 5\frac{5}{6}$$

$$= (10 - 5) + (\frac{7}{6} - \frac{5}{6})$$

$$= 5 + \frac{2}{6} = 5\frac{2}{6} = 5\frac{1}{3}$$



خلاصة الدرس دة

سواء (+) أو (-)

المسألة دي تتحل بطريقتين

$$2\frac{3}{5} + 3\frac{1}{5}$$

الاولى

improper

$$2\frac{3}{5} + 3\frac{1}{5}$$

(ايدو x رجليه + راسه)

$$\frac{13}{5} + \frac{16}{5} = \frac{29}{5} = 5\frac{4}{5}$$

الثانية

Decomposing

$$2\frac{3}{5} + 3\frac{1}{5}$$

$$(2 + 3) + (\frac{3}{5} + \frac{1}{5})$$

$$5 + \frac{4}{5} = 5\frac{4}{5}$$



profhelwan

15

$$4\frac{2}{3} - 1\frac{1}{3}$$

$$\frac{14}{3} - \frac{4}{3} = \frac{10}{3}$$

$$= \underline{3\frac{1}{3}}$$

$$(4-1) + (\frac{2}{3} - \frac{1}{3})$$

$$3 + \frac{1}{3} = \underline{3\frac{1}{3}}$$

بدون حلوان

* كمان واحدة من بتوع عباس

$$5\frac{2}{7} - 3\frac{5}{7}$$

$$\frac{37}{7} - \frac{26}{7}$$

$$= \frac{11}{7} = \underline{1\frac{4}{7}}$$

$$4\frac{9}{7} - 3\frac{5}{7}$$

$$= (4-3) + (\frac{9}{7} - \frac{5}{7})$$

$$= 1 + \frac{4}{7} = \underline{1\frac{4}{7}}$$

طبعاً عندنا بالطريقة
التي نرجل

* Solve equations:

لو الكوف في الأول مكتوب
نعمل عكس المطلوب

$$\textcircled{1} A + 1\frac{3}{4} = 7\frac{1}{4}$$

$$A = 7\frac{1}{4} - 1\frac{3}{4} = 6\frac{5}{4} - 1\frac{3}{4}$$

$$= 5\frac{2}{4} = \underline{5\frac{1}{2}}$$

$$\textcircled{2} B - \frac{7}{8} = \frac{6}{8}$$

$$B = \frac{6}{8} + \frac{7}{8} = \frac{13}{8} = \underline{1\frac{5}{8}}$$

بدون حلوان

$$\textcircled{3} \quad 2\frac{5}{8} - C = 1\frac{1}{8}$$

$$C = 2\frac{5}{8} - 1\frac{1}{8} = 1\frac{4}{8} = 1\frac{1}{2}$$

لو الحرف في النص

(-) منه غير ما بهن

$$\textcircled{4} \quad 4 - p = 1\frac{1}{5}$$

$$p = 4 - 1\frac{1}{5} = 3\frac{5}{5} - 1\frac{1}{5} = 2\frac{4}{5}$$

Lesson 2: Finding Like denominators
use L.C.M.

1 Rewrite The given two mixed numbers with Like deno. in two different ways

خليهم Like بطريقتين مختلفتين

$$3\frac{1}{4} \text{ and } 1\frac{6}{30}$$

الطريقة الأولى: نجيب ال L.C.M

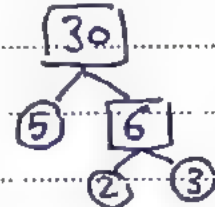
$$4 \times 15 = 60$$

$$30 \times 2 = 60$$

لأن 4, 30

$$3\frac{15}{60}$$

$$1\frac{12}{60}$$



$$4 = 2 \times 2$$

$$30 = 2 \times 3 \times 5$$



$$\text{L.C.M} = 2 \times 2 \times 3 \times 5 = \boxed{60}$$

الطريقة الثانية: نعمل Simplify قبل ما نجيب L.C.M

$$3\frac{1}{4} \text{ , } 1\frac{6}{30} = 1\frac{1}{5}$$

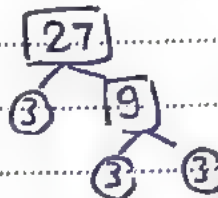
L.C.M to 4 and 5 is $\boxed{20}$

$$3\frac{5}{20} \text{ , } 1\frac{4}{20}$$

أعتقد رى أسهل

واحدة كمان $10 \frac{5}{6}$ and $5 \frac{15}{27}$

First way L.C.M for 6 and 27



$$6 = 2 \times 3$$

$$27 = 3 \times 3 \times 3$$

$$\text{L.C.M} = 2 \times 3 \times 3 \times 3 = \boxed{54}$$

$$6 \times 9 = 54$$

$$27 \times 2 = 54$$

$$10 \frac{5 \times 9}{6 \times 9} = \boxed{10 \frac{45}{54}}$$

$$5 \frac{15 \times 2}{27 \times 2} = \boxed{5 \frac{30}{54}}$$

Second way Simplify

$$10 \frac{5}{6} \quad \leftarrow \quad 5 \frac{15 \div 3}{27 \div 3} = 5 \frac{5}{9}$$

(pl. 5)

L.C.M for 6 and 9

$$6 = 2 \times 3$$

$$9 = 3 \times 3$$

$$\text{L.C.M} = 2 \times 3 \times 3 = \boxed{18}$$

$$6 \times 3 = 18$$

$$9 \times 2 = 18$$

$$10 \frac{5}{6} = \boxed{10 \frac{15}{18}}$$

$$5 \frac{5}{9} = \boxed{5 \frac{10}{18}}$$

Lesson 3 Estimation

↑ with Mixed Numbers

1) Use number sense and estimation to Complete:

a. $7\frac{a}{8}$ is little greater than $7\frac{1}{2}$

Estimate for

a:

هو طالب من أخط الـ a يكام على شان يبقى

العدد أكبر من $7\frac{1}{2}$ طب نمل ليه

نص تحت على الـ 8 ونشوف نصها كام 4 يبقى a دي

لازم تبقى أكبر من 4 يعني

الاجابتين صح $a = 5 \text{ or } 6$

b. $3\frac{b}{9}$ is almost 4

هو طالب أن العدد يزيد ويقرب من الـ 4

يبقى نمل ليه

نص تحت على الـ 9 ونشوف نصها كام $\frac{1}{2}$ لازم يبقى

الـ b أكبر من 4 بكتشيس يعني

الشيء صح $b = 8 \text{ or } 7$

c. $10\frac{3}{c}$ is slightly less than $10\frac{1}{2}$

هو طالب أن العدد يقل عنه $1\frac{1}{2}$

فلازم المرة دي نص فوق على الـ 3

ولا لازم الـ 3 تبقى أقل من $\frac{1}{2}$ العدد اللي تحت

طب نمل ليه 19 نضرب $6 = 3 \times 2$

ويبقى الـ c أكبر من 6

$c = 7$

حاسس
انها رغبة

② Using estimation to add and Subtract

a) $6\frac{3}{4} - 2\frac{1}{5}$

$\frac{3}{4} \rightarrow 1$

$6\frac{3}{4} \rightarrow 7$

$\frac{1}{5} \rightarrow 0$

$2\frac{1}{5} \rightarrow 2$

$6\frac{3}{4} - 2\frac{1}{5}$ estimate $7 - 2 = 5$

b) $4\frac{2}{3} + 3\frac{5}{6}$

$\frac{2}{3} \rightarrow 1$

$4\frac{2}{3} \rightarrow 5$

$\frac{5}{6} \rightarrow 1$

$3\frac{5}{6} \rightarrow 4$

$4\frac{2}{3} + 3\frac{5}{6}$ estimate $5 + 4 = 9$

c) $2\frac{1}{5} + 3\frac{10}{21} = 2 + 3\frac{1}{2} = 5\frac{1}{2}$

$\frac{10}{21} \Rightarrow \frac{1}{2}$

علشان 21 نصف 10
وال 10 قريبة من 12

d) $4\frac{3}{5} - 1\frac{7}{12} = 4\frac{1}{2} - 1\frac{1}{2} = 3$

e) $3\frac{21}{24} - 2\frac{1}{3} = 4 - 2\frac{1}{2} = 1\frac{1}{2}$

f) $9\frac{6}{11} + 2\frac{3}{100} = 9\frac{1}{2} + 2 = 11\frac{1}{2}$

g) $7\frac{5}{14} - 3\frac{19}{34} = 7\frac{1}{2} - 3\frac{1}{2} = 4$

Unit 8

Lessons 4, 5, 6

Lesson 4: Using Models to add and Subtract Mixed numbers

يعني إيه Mixed numbers ؟ الكلمة دي أنا سمعتها فين قبل كدة ؟
آه لما أخذنا أنوع ال Fractions ثلاثة

- ① proper $\frac{3}{5}$ ② improper $\frac{5}{3}$ ③ Mixed $1\frac{2}{3}$

أنواع ال كوددة

✳ في الرسم دة هتفهم ازاي فعل + و -

ولمة الثانية بال
Numberline

مرة بال
Area Models

(A) Adding and Subtracting Mixed numbers Using Models:

ركز مع البروف في الألوان والسؤال هو

Use an area model to find:

a. $1\frac{4}{5} + 2\frac{1}{2}$

الخطوة الأولى هتقول لرسم



أخذنا ال Fraction مرة يتقسم بالطول مرة
يتقسم العرض

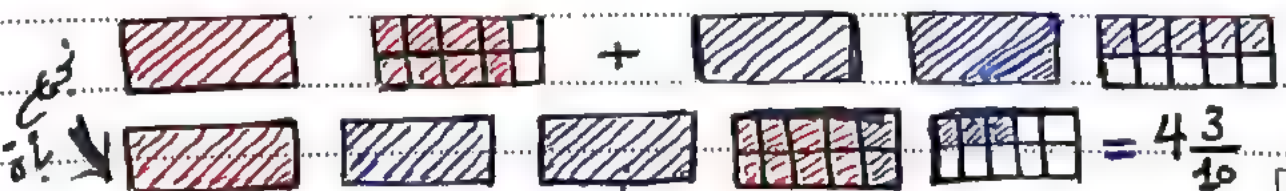
الخطوة الثانية : بنص على ال Denominator اللى

مكتوب تحته 5 هيتقسم لجزئين واللى مكتوب

تحته 2 هيتقسم ل 5 أجزاء يعني باليكس

والعكس

التاكس كدهون



نتج
بأه

رماغك لفت ومملت error طب خذ دعي

b. $3\frac{3}{8} - 2\frac{1}{4}$

تكراري

الرسم Modeling

الكتاب يستخدم النذجة مثل من الرسم كتر يا بطل



التقسيم Dividing

الى تحت 8 يتقسم 4 أخيراً والى تحت 4 يتقسم 8 أفراد



الطرح Subtracting

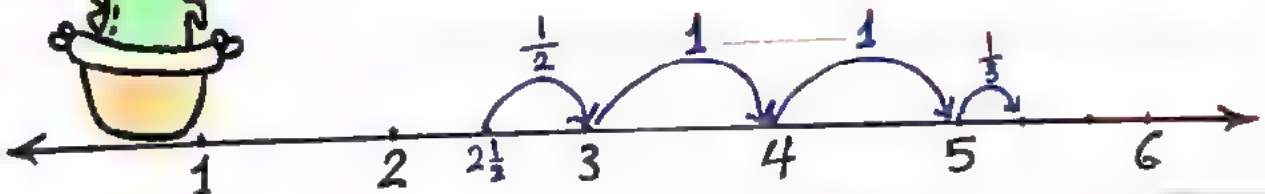
$3\frac{3}{8} - 2\frac{1}{4} = 1\frac{4}{32} = 1\frac{1}{8}$

حذفنا 2 و 12 صير صغير حذفنا منهم 8

B) Adding and Subtracting using Numberline
يا خرابي يا نا يا أما هو أنا ناقص يا أخويا

الكيفية الكتاب شرح ال - بس
يبقى خلاص اعمل نفسك ميت وافهم ال - بس

Use number line to Subtract $5\frac{1}{3} - 2\frac{1}{2}$



نرسم ال numberline

② نبدأ من $2\frac{1}{2}$ العدد الأخير في الحالة ونطرق رقم كد ما نوصل $5\frac{1}{3}$

$\frac{1}{2} + 1 + 1 + \frac{1}{3}$

③ نعد (+) للنظرات (شغل أراب)

$$\frac{3}{6} + 1 + 1 + \frac{2}{6} = 2\frac{5}{6}$$

(Lesson 5) Adding and Subtracting Mixed numbers with unlike denominators.

واضح كدة مع العنوان الطويلة هتعمل ال (+) وال (-) لما تكون ال denominators مختلفة و هتعمل الكلا مية بطريقتين

Using

Improper Fractions

$$2\frac{1}{2} + 1\frac{1}{3}$$

$$= \frac{5}{2} + \frac{4}{3}$$

$$= \frac{15}{6} + \frac{8}{6}$$

$$= \frac{23}{6} = 3\frac{5}{6}$$

$$5\frac{1}{2} - 2\frac{3}{5}$$

$$\frac{11}{2} - \frac{13}{5}$$

$$\frac{55}{10} - \frac{26}{10} = \frac{29}{10}$$

$$= 2\frac{9}{10}$$

تعال فتدربا على دي تايذج ←

Using

Decomposing mixed numbers

$$2\frac{1}{2} + 1\frac{1}{3}$$

$$(2+1) + (\frac{1}{2} + \frac{1}{3})$$

$$3 + (\frac{3}{6} + \frac{2}{6})$$

$$3 + \frac{5}{6} = 3\frac{5}{6}$$

$$5\frac{1}{2} - 2\frac{3}{5}$$

$$(5-2) + (\frac{1}{2} - \frac{3}{5})$$

دي مش هتفعل دي هتفعل

علشان ال $\frac{1}{2}$ أصغر من $\frac{3}{5}$

طب نفعل ايه ؟

نكسر الصغيب ازاي ؟ كدهون

$$4\frac{3}{2} - 2\frac{3}{5}$$

$$(4-2) + (\frac{3}{2} - \frac{3}{5})$$

$$2 + (\frac{15}{10} - \frac{6}{10})$$

$$2 + \frac{9}{10} = 2\frac{9}{10}$$

$$8\frac{1}{3} - 2\frac{4}{5}$$

انصبة من عوامد

قبل ما نحل مسألة الـ (ـ) نبصق على

الـ Fractions الاول

هتلاحظ ان الـ $\frac{1}{3}$ اصغر من $\frac{4}{5}$ يبقى نستلف ازاى؟

كده هكون

بناخذ من الـ 8 دى 1 تبقى 7 فيل مشكلة دى؟

سامعك بتقول ان الـ 1 الى استلفناه دة قبل ما نزوده

على الـ Fraction هنكتبه على صورة $1 = \frac{3}{3}$ علشان ينفع

نزوده على الـ $\frac{1}{3}$ فيبقى

$$\frac{1}{3} + \frac{3}{3} = \frac{4}{3}$$

$$\begin{aligned} 8\frac{1}{3} - 2\frac{4}{5} &= 7\frac{4}{3} - 2\frac{4}{5} \\ &= (7 - 2) + \left(\frac{4}{3} - \frac{4}{5}\right) \\ &= 5 + \left(\frac{20}{15} - \frac{12}{15}\right) \\ &= 5 + \frac{8}{15} = 5\frac{8}{15} \end{aligned}$$

Lesson 6:



Adding and Subtracting mixed numbers by adjusting the mixed numbers

من الدرس دة بنكمل اول Fraction

في مسألة نوصله لـ whole يعني

نكمل العدد الا فوقعه كد ما يوصل الى

والله ما فاقم حاجة ؟؟ حاسس بيك بص يا سيدى

$$1\frac{3}{7} + 3\frac{2}{7} =$$

بص اول Fraction الى هو $\frac{3}{7}$ نكملة ازاى محتاج $\frac{4}{7}$

مرة هنزود $\frac{4}{7}$ ومرة ننقص $\frac{4}{7}$

آه واصلح كده هون

$$\left(1\frac{3}{7} + \frac{4}{7}\right) + \left(3\frac{2}{7} - \frac{4}{7}\right)$$

نفس الخطوة الى فاتت

$$(1\frac{3}{7} + \frac{4}{7}) + (3\frac{2}{7} - \frac{4}{7})$$

plus (+)

$$1\frac{7}{7} + (2\frac{9}{7} - \frac{4}{7})$$

زود
نقص

$$2 + 2\frac{5}{7} = 4\frac{5}{7}$$

كمان واحدة عشان خاطري بلاش

$$5\frac{2}{7} - 2\frac{4}{7}$$

Minus (-)

$$(5\frac{2}{7} + \frac{6}{7}) - (2\frac{4}{7} + \frac{6}{7})$$

زود
زود

$$5\frac{8}{7} - 2\frac{7}{7} = 5\frac{8}{7} - 3$$

$$= 2\frac{8}{7} = 3\frac{1}{7}$$

وبعدين يعني كل دي طرحة و آخرتلك معاكم يا مدرسين !

يا اني ركن على طريقة واحدة واتدري على كويس

وانتي يا ماما

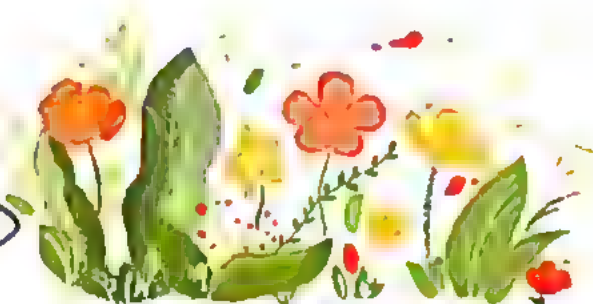
من حقا شرعا وقانونا وعلى لذاهب الاربعة

وانتي يا بابا

انك تقطعي الورقة دي وترميل من البكونة

بشرط تكون فاهنا الورقة الى قبل

سلامو عليكو



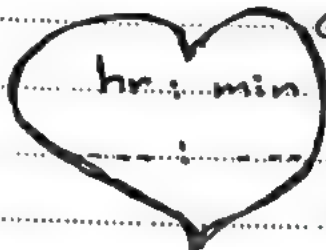
Lesson: 7

Story Problems with Mixed numbers

Lesson: 8

More Story problems with mixed numbers.

* كى الساعة كام دلو قى ؟ وانت بتذاكر الدرس ده
اكتب الساعة هنا وصور الورقة وابعتلى واتس



011 277 33 842

علشان أعرف إنك شاظر وبتذاكر
كلنا عارفين أن

One year = 12 months

One day = 24 hours

One Hour = 60 minutes

One Minute = 60 seconds

$\frac{1}{2}$ year = 6 months

$\frac{1}{4}$ year = 3 months

$\frac{3}{4}$ year = 9 months

$\frac{1}{3}$ year = 4 months

$\frac{1}{2}$ day = 12 hours

$\frac{1}{4}$ day = 6 hours

* Complete

$$\frac{1}{10} \times 6 = \frac{6}{60}$$

① $7\frac{1}{10}$ minutes = 7 mins and 6 sec

$$\frac{3}{4} \times 15 = \frac{45}{60}$$

② $4\frac{3}{4}$ hours = 4 hrs and 45 mins

③ $6\frac{1}{2}$ year = 6 years and 6 months

$$\frac{1}{6} \times 10 = \frac{10}{60}$$

④ $2\frac{1}{6}$ hours = $[120 + 10]$ mins = 130 mins

⑤ 80 minutes = — hour

$$\frac{80}{60} = 1 \frac{20}{60} = 1 \frac{1}{3}$$

Lesson 8 : More Story Problems

تین شوکی

- (1) Habiba is planting three plume thistle plants. It took her $\frac{5}{6}$ minute to plant the first one. The second plant took $\frac{1}{12}$ min. longer to plant than the first. The third plant took $\frac{1}{10}$ less than time to plant the second one. How long did it take to plant the third plume thistle?

$$\text{Time of Second} = \frac{5}{6} + \frac{1}{12} = \frac{10}{12} + \frac{1}{12} = \frac{11}{12} \text{ min.}$$

$$\text{Time of Third} = \frac{11}{12} - \frac{1}{10} = \frac{55}{60} - \frac{6}{60} = \frac{49}{60} \text{ min.}$$

= 49 seconds

- (2) Mona walked $3 \frac{3}{4}$ Km on Monday, $4 \frac{1}{3}$ Km on Tuesday and $2 \frac{7}{12}$ Km on Wednesday. What distance did she walk in all?

$$\text{Total distance} = 3 \frac{3}{4} + 4 \frac{1}{3} +$$

$$= (3 + 4 + 2) + \left(\frac{3}{4} + \frac{1}{3} + \frac{7}{12} \right)$$

$$= 9 + \left(\frac{9}{12} + \frac{4}{12} + \frac{7}{12} \right)$$

$$= 9 + \frac{20}{12}$$

$$= 9 + 1 \frac{5}{3} = 10 \frac{8}{12} = 10 \frac{2}{3}$$

Lesson 1 : Multiplying Fraction for Mixed number by whole number.

• من الدرس دة عاوزين نتعلم ازاي نعد x بين $\frac{1}{3}$ Fraction و ال whole numb.

للازم في الاول نكون عارفين أف أي Whole number هو Fraction بس ال

Denominator = 1

أبسط حاله

$$5 = \frac{5}{1}, \quad 3 = \frac{3}{1}, \quad 9 = \frac{9}{1}$$

وهكذا

Let's Start

II Multiply, then write the result in Simplest form:

① $\frac{1}{3} \times 5$

الطريقة الأولى: بتاعة الناس الطيبين بتوع زمان عبدو وبتة

$$\frac{1}{3} \times 5 = \frac{1}{3} \times \frac{5}{1} = \frac{1 \times 5}{3 \times 1} = \frac{5}{3} = 1 \frac{2}{3}$$

نعال بأة نتعلم شوية طرعة ثانية جديدة (النج)
معرفة لشي دي يعني ايه بس يلا

الطريقة الثانية: اسمها Repeated Addition:

$$\frac{1}{3} \times 5 = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{5}{3} = 1 \frac{2}{3}$$

طب ماحس دي سهلة برفعة ... آه به لوال 5 دي
كانت 20 ضلك كنت محتاج 10 كراسات و 8 أقلام

Lesson 1

Unit 9

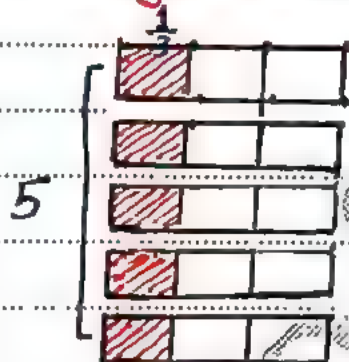
Using Numberline

$$\frac{1}{3} \times 5$$

الطريقة الثالثة * اسمها *
 ودي بنقسم فين 3
 خط الاعداد بين كل رقمين الى 3 اجزاء متساوية
 طب اشهر 3 زي العدد الى تحت في ال Fraction
 ونقفز 5 مرات
 الى $\frac{5}{3}$



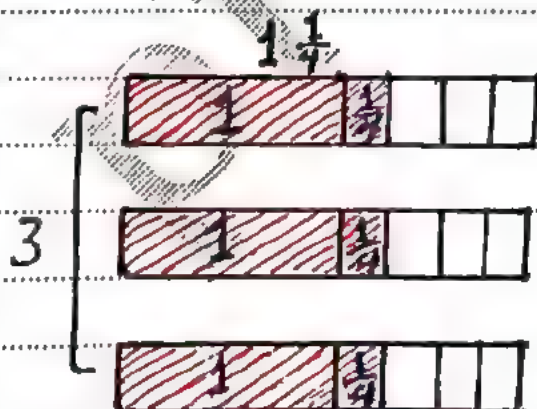
Using Area Model



$$\frac{1}{3} \times 5 = \frac{5}{3} = 1 \frac{2}{3}$$

طوب ل Mixed number
 نكال نشوف

$$1 \frac{1}{4} \times 3$$



$$1 \frac{1}{4} \times 3 = 3 + \frac{3}{4} = 3 \frac{3}{4}$$

Distributive Property

$$1 \frac{1}{4} \times 3 = (1 + \frac{1}{4}) \times 3 = 1 \times 3 + \frac{1}{4} \times 3$$

$$= 3 + \frac{3}{4} = 3 \frac{3}{4}$$

Lesson 1

Unit 8

$$3 \frac{1}{4} \times 8$$

بصو باة

دى ممكن نحلها بالطريقة اللى نحبك

مثلاً ممكن نحل كدة

$$2 \frac{1}{4} \times 6 = \frac{9}{4} \times \frac{6}{1} = \frac{54}{4} = 13 \frac{2}{4} = 13 \frac{1}{2}$$

مثلاً عا صباك

صح ١٩

عملنا 2 ÷

$$2 \frac{1}{4} \times 6 = \frac{9}{4} \times \frac{3}{1} = \frac{9}{2} \times \frac{3}{1} = \frac{27}{2} = 13 \frac{1}{2}$$

طب نجرب دى كمان

طب آخر طريقة

$$2 \frac{1}{4} \times 6 = (2 \times 6) + (\frac{1}{4} \times 6) = 12 + \frac{3}{2} = 12 + 1 \frac{1}{2} = 13 \frac{1}{2}$$

1) EZZ notice that $\frac{2}{3}$ of the 6 rose bushes are in bloom. How many rose bushes are in bloom?

$$\text{Answer} = \frac{2}{3} \times 6 = \frac{2}{1} \times 2 = \frac{4}{1} = 4$$

2) Complete.

$$1) 4 \frac{7}{8} \times \frac{5}{5} = 4 \frac{7}{8} \longrightarrow 5$$

$$2) \text{ if } \frac{4}{13} \times a = \frac{4}{13} + \frac{2}{13}$$

$$\frac{4}{13} + \frac{2}{13} = \frac{6}{13}$$

$$\text{يعنى الـ } a = \frac{6}{4}$$

$$\frac{4}{13} \times \frac{6}{4} = \frac{6}{13}$$

$$a = \frac{6}{4} \text{ or } 1 \frac{1}{2}$$

Lesson 2 Estimating Products of Fractions and mixed numb.

درس دة للتقدير منه لكل الصبح
القاعدة بتقول لو أنا بعن x ولقيت ال Fraction
التاني العدد اللي فوقه أكبر من اللي تحت
 $n > d$ يبقى الناتج هيكبر عن ال Fraction الأول

$$\frac{1}{2} \times \frac{5}{2} = \frac{5}{4}$$

$5 > 2$ $\frac{5}{4} > \frac{1}{2}$

ولو

ال Fraction التاني العدد اللي فوقه أصغر من اللي تحت
 $n < d$ يبقى الناتج هيصغر عن ال Fraction الأول

$$\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$$

$3 < 5$ $\frac{3}{10} < \frac{1}{2}$

ولو ال Fraction التاني

العدد اللي فوقه = العدد اللي تحت
 $n = d$ يبقى الناتج = ال Fraction الأول

$$\frac{1}{2} \times \frac{5}{5} = \frac{5}{10} = \frac{1}{2}$$

$5 = 5$ $\frac{5}{10} = \frac{1}{2}$

الناتج

* Indicate whether product $<$, $=$, $>$ First frac

a. $\frac{3}{5} \times \frac{5}{3}$ $5 > 3 \Rightarrow$ greater than $\frac{3}{5}$

b. $\frac{3}{5} \times \frac{3}{5}$ $3 < 5 \Rightarrow$ Less than $\frac{3}{5}$

بس خلاص زي ما بيتقول شغبول

Lesson: Understanding

3

Multiplication with Fractions

Using rectangular model

1) Use an area model to show Fraction Multipl.
Simplify your answer if possible:

① $\frac{1}{2} \times \frac{1}{5}$

نعمل جدول عدد البسمة 2 والبسمة 5

كدهون ←

نلون $\frac{1}{2}$ بلون بالطول

نلون $\frac{1}{5}$ بلون تاني العرض



$$\frac{1}{2} \times \frac{1}{5} = \frac{1}{10}$$

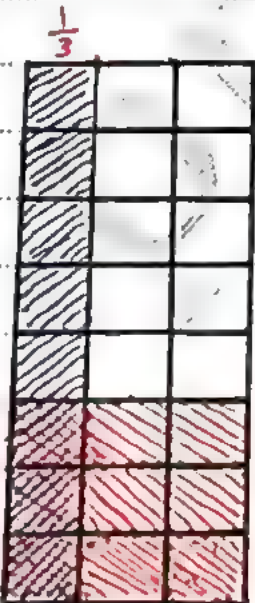
② $\frac{1}{3} \times \frac{3}{8}$

نعمل جدول عدد البسمة 3 والبسمة 8

نلون $\frac{1}{3}$ بلون بالطول

نلون $\frac{3}{8}$ بلون آخر العرض

كدهون ←



$$\frac{1}{3} \times \frac{3}{8} = \frac{3 \div 3}{24 \div 3} = \frac{1}{8}$$

نوع لمتن أمني

ألا أخاطر أحدًا
أكثر من 3 أيام

Lesson 4 - Multiplying Fractions by Fractions

علشان نعمل \times لـ Fractions خذ بالك واعمل Simplify
الأول وبعدين $up \times up$
ازاي $down \times down$

$$\frac{5}{6} \times \frac{2}{15}$$

رأي السكر في التمايل
لاحظ 5 فوم 15 تحت
نعمل $\div 5$

$$\frac{1}{3} \times \frac{2}{15} = \frac{1 \times 1}{3 \times 3} = \frac{1}{9}$$

وكمان 2 فوم 6 تحت
نعمل $\div 2$

$$\frac{5}{6} \times \frac{2}{15} = \frac{5 \times 2}{6 \times 15} = \frac{10}{90} \div 10 = \frac{1}{9}$$

أو ممكن تتحل كدة
وعلى رأي لاشك ← حل بالك يعطيك وهات الدرة الى تعصب بابا وماما

شوية حكايات من الكلوبات ابقوا معنا

$$\textcircled{1} \frac{1}{3} \times \frac{1}{4} = \frac{1 \times 1}{1 \times 2} = \frac{1}{2}$$

$$\textcircled{2} \frac{1}{2} \times \frac{1}{4} = \frac{1 \times 1}{2 \times 4} = \frac{1}{8}$$

$$\textcircled{3} \frac{2}{3} \times \frac{4}{15} = \frac{2 \times 4}{3 \times 3} = \frac{8}{9}$$

$$\textcircled{4} \frac{1}{4} \times \frac{4}{9} = \frac{1 \times 4}{1 \times 3} = \frac{4}{3}$$

ملاحظة
كلبونة
Simplify يكون

الى فوق مع الى تحت

ما ينفش فوم مع فوم

ولا تحت مع تحت

بنشوف الرقمين جمر مع بعض في

table ايه ونعلم \div

Lesson 4

Unit 9

Excellents pupils

للشطار وبنين الاعداء يستعملون

$$① \quad \frac{12}{13} \times \frac{2}{17} \times \frac{1}{8} = \frac{1 \times 2 \times 1}{1 \times 1 \times 4} = \frac{2^1}{2^4} = \frac{1}{2}$$

$$② \quad \frac{24}{16} \times \frac{5}{13} \times \frac{13}{15} = \frac{2 \times 1 \times 1}{1 \times 1 \times 3} = \frac{2}{3}$$

$$③ \quad \frac{14}{17} \times \frac{14}{24} \times \frac{3}{5} = \frac{2^1}{16^5} = \frac{1}{5}$$

$$④ \quad \frac{1}{2} \times \frac{12}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} \times \frac{6}{7} \times \frac{7}{8} = \frac{1}{8}$$

$$⑤ \quad 0.25 \times \frac{4}{5} = \frac{1}{4} \times \frac{4}{5} = \frac{1}{5}$$

$$⑥ \quad \frac{4}{20} \times 0.8 = \frac{14}{5 \times 20} \times \frac{8^4}{16^5} = \frac{4}{25}$$

$$⑦ \quad \frac{3}{5} \times 1.5 = \frac{3}{5} \times \frac{3}{2} = \frac{9}{10}$$

$$⑧ \quad 0.6 \times \frac{15}{16} \times \frac{8}{9} = \frac{126}{16} \times \frac{15}{16} \times \frac{8^1}{9^3} = \frac{1}{2}$$

Complete

$$a. \quad \frac{1}{4} \times \frac{7}{3} = \frac{7}{12}$$

$$b. \quad \frac{4}{5} \times \frac{1}{3} = \frac{4}{15}$$

$$c. \quad \frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$$

$$d. \quad \frac{2}{3} \times \frac{1}{2} \times \frac{3}{4} = \frac{1}{4}$$

Unit: 9

Lessons 5-6-7

Lesson 5 Multiplying a mixed number by Fraction or mixed number.

$$(1) 3\frac{4}{7} \times \frac{1}{5}$$

الطريقة الأولى

$$(3 + \frac{4}{7}) \times \frac{1}{5}$$

$$(3 \times \frac{1}{5}) + (\frac{4}{7} \times \frac{1}{5})$$

$$\frac{3 \times 1}{5 \times 1} + \frac{4}{35}$$

$$\frac{21}{35} + \frac{4}{35} = \frac{25}{35} = \frac{5}{7}$$

Distributive property

$$(2) 5\frac{1}{3} \times 2\frac{5}{8}$$

$$(5 + \frac{1}{3}) \times (2 + \frac{5}{8})$$

$$(5 \times 2) + (5 \times \frac{5}{8}) + (\frac{1}{3} \times 2) + (\frac{1}{3} \times \frac{5}{8})$$

$$10 + \frac{25 \times 3}{8 \times 3} + \frac{2 \times 8}{3 \times 8} + \frac{5}{24}$$

$$10 + \frac{75}{24} + \frac{16}{24} + \frac{5}{24}$$

$$10 + \frac{96}{24} = 10 + 4 = 14$$

اخص على رى مسألة ليكدة

الطريقة الثانية

$$5\frac{25}{7} \times \frac{1}{5}$$

$$\frac{5 \times 1}{7 \times 1} = \frac{5}{7}$$

حولة أهي وزى لفل

اسمها

improper fraction

$$(2) 5\frac{1}{3} \times 2\frac{5}{8}$$

$$2\frac{16}{3} \times \frac{24}{8}$$

$$\frac{2 \times 7}{1 \times 1} = \frac{14}{1} = 14$$

شوف كل دة أد ايه

و دة أد ايه

Lesson 8 Story Problems

اشترت

- ① Aya purchased a bag of tomatoes mass of $2\frac{1}{3}$ kg. Her brother Ameen purchased a bag of potatoes of $1\frac{1}{2}$ times more than Aya's bag. What is the mass of Ameen's bag?

Solution

$$\begin{aligned}\text{Mass of Ameen's bag} &= 2\frac{1}{3} \times 1\frac{1}{2} \\ &= \frac{7}{3} \times \frac{3}{2} = \frac{7}{2} = 3\frac{1}{2} \text{ kg}\end{aligned}$$

- ② Farida is reading a chapter book. She can read $20\frac{1}{2}$ pages in 1 hour. If she plans to read for 1 hour and 15 mins. How many pages will she read?

Solution

$$15 \text{ mins} = \frac{15}{60} = \frac{1}{4} \text{ hour}$$

$$\begin{aligned}\text{Number of pages} &= 20\frac{1}{2} \times 1\frac{1}{4} \\ &= \frac{41}{2} \times \frac{5}{4} \\ &= \frac{205}{8} \text{ pages}\end{aligned}$$

آہ واللہ اکل صلیع کہہ سہ مکن

نکشیہ کہہ $25\frac{3}{8}$

Story problems involving fractions

as Division

* Division Algorithm

$$8 \div 5 = 1 \frac{3}{5}$$

$$\begin{array}{r} 1 \\ 5 \overline{) 8} \\ \underline{-5} \\ 3 \end{array}$$

$$3 \div 2 = 1 \frac{1}{2}$$

$$\begin{array}{r} 1 \\ 2 \overline{) 3} \\ \underline{-2} \\ 1 \end{array}$$

① The price of 7 pens is 13 L.E. Find The price of each pen?

$$13 \div 7 = 1 \frac{6}{7} \text{ L.E.}$$

$$\begin{array}{r} 1 \\ 7 \overline{) 13} \\ \underline{-7} \\ 6 \end{array}$$

② Ali ran 20 km in 90 mins. How many Kilometers per minute did he run?

$$\text{He ran} = 20 \div 90 = \frac{2}{9} \text{ km per min.}$$

③ Shehab has 6 houseplants it took him 45 min to replant them. How long did it take him to replant each one.

$$\text{it takes} = 45 \div 6 = 7 \frac{3}{6} = 7 \frac{1}{2}$$

$$\begin{array}{r} 7 \\ 6 \overline{) 45} \\ \underline{-42} \\ 3 \end{array}$$

Dividing Unit Fraction by whole numbers

(12)

Dividing whole Numbers by Unit Fractions

كل حاجة وعكسها

قبل ما نشرح الدرس دة غاوزين نتفق على حاجة
لو كتبنا 3 كدة ببقى $\frac{3}{1}$ ولو حيينا نقولها هبقى $\frac{1}{3}$

فكرة الدرس دول

① سبب الأول زى ما هو $\frac{1}{5} \div 3$

② تحول ال \div إلى \times

③ و نقلب اللى بعده

④ down down up up $\frac{1}{5} \times \frac{1}{3} = \frac{1}{15}$

* Evaluate each of the following:

① $\frac{1}{2} \div 10 = \frac{1}{2} \times \frac{1}{10} = \frac{1}{20}$

② $\frac{1}{9} \div 8 = \frac{1}{9} \times \frac{1}{8} = \frac{1}{72}$

③ $16 \div \frac{1}{5} = 16 \times 5 = 80$

④ $100 \div \frac{1}{3} = 100 \times 3 = 300$

⑤ $15 \div \frac{1}{3} = 15 \times 3 = 45$

⑥ $9 \div \frac{1}{2} = 9 \times 2 = 18$

Using area model

* Use area model to evaluate:

$$\frac{1}{5} \div 2$$

Solution



$$\frac{1}{5} \div 2 = \frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$$

* write the missing number in each equation

$$(A) \quad \frac{1}{3} \div a = \frac{1}{12} \quad \frac{1}{3} \times b = \frac{1}{12}$$

$$a = 4$$

$$b = \frac{1}{4}$$

$$(B) \quad \frac{1}{2} \times j = \frac{1}{14} \quad \frac{1}{2} \div k = \frac{1}{14}$$

$$j = \frac{1}{7}$$

$$k = 7$$

$$(C) \quad 6 \div h = 30 \quad 6 \times j = 30$$

$$h = \frac{1}{5}$$

$$j = 5$$

$$(d) \quad 8 \times k = 24$$

$$8 \div m = 24$$

$$k = 3$$

$$m = \frac{1}{3}$$

Story problems

① How many $\frac{1}{3}$ Cup servings are in 5 cups of chocolate?

$$5 \div \frac{1}{3} = 5 \times 3 = 15 \text{ cups}$$

② A teacher wants to give $\frac{1}{4}$ of a box pencil to each student. He has 6 boxes of pencils. To how many students will he be able to give pencils?

$$6 \div \frac{1}{4} = 6 \times 4 = 24 \text{ students}$$

③ A Computer takes $\frac{1}{300}$ of a second to complete a math problem. How many math problems can the computer answer in 90 seconds?

$$90 \div \frac{1}{300} = 90 \times 300 = 27,000 \text{ problems}$$

عزائي أبي الصلاة بإيمان

وعزائي أمي الصبر بحكمة

وقلهم ربّي علني واستعينوا بالصبر والصلاة

ثلاثيات

Tricky Triangles

Triangle:

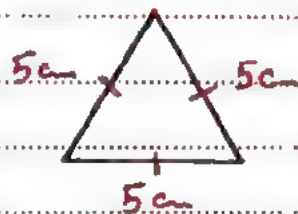
is a polygon that has 3 sides and 3 angles

* Types of Triangles according to the Length of their Sides

أنواع المثلثات حسب أطوال أضلاعها

Equilateral

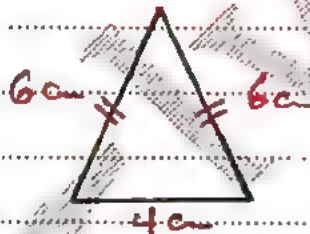
(ثلاث أضلاع متساوية)



Three Sides are equal in length

Isosceles

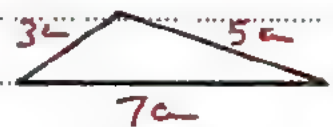
(ثلاث أضلاع متساوية)



Two Sides are equal

Scalene

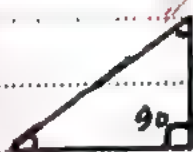
(ثلاث أطرافين متساوية)



Three Sides are different

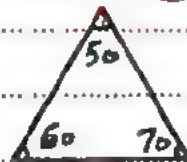
* Types of triangles according to the measure of their angles

Right-angled triangle



Has one right angle and two acute angles

Acute-angled triangle



Each of its 3 angles is Acute

Obtuse-angled triangle



Has one obtuse angle and two acute

ملفوظة كالمطبعة

Any triangle has at least **two** acute angles.

[1] Determine type of triangle :-

① $m(\angle E) = 30^\circ$, $m(\angle F) = 90^\circ$ and $m(\angle G) = 60^\circ$

تتكون أكبر angle كما ٩٠ لو كانت

Obtuse ← أكبر من 90° يبقى إلتك

Acute ← أقل من 90° يبقى إلتك

Right ← تساوي 90° يبقى إلتك

وعلى أن أكبر angle هنا 90° يبقى إلتك

Right angled triangle

② $m(\angle A) = 30^\circ$, $m(\angle B) = 40^\circ$, $m(\angle C) = 110^\circ$

obtuse angled triangle

③ $m(\angle X) = m(\angle Y) = 70^\circ$, $m(\angle Z) = 40^\circ$

Acute angled triangle.

[2] Determine type of triangles according to their side lengths.

① $AB = 6.5 \text{ cm}$, $BC = 7 \text{ cm}$, $CA = 6.5 \text{ cm}$

isosceles لأن $AB = CA$ يبقى

② $AB = BC = CD = 5 \text{ cm}$ **equilateral**

③ $XY = 10 \text{ cm}$, $YZ = 7 \text{ cm}$, $XZ = \frac{1}{2} XY$

Scalene لأن طاقين يبقين $XY = 5 \text{ cm}$ يبقى

4.5
ملين

Using tiling to Calculate Area
حساب مساحة بقدر
الوحدات (البلاط)

1. Count the unit tiles to determine area of rectangle.

1	2	3	4
2			
3			

البلاط

Number of tiles = 12 tiles

or

$$A = L \times w = 4 \times 3 = 12$$

Square Units

2. Draw a rectangle with an area of 15 Square units

1	2	3	4	5
2				
3				

3. Draw rectangle with dimensions $4\frac{1}{2}$ units and $3\frac{1}{2}$ units

	$4\frac{1}{2}$				
	1	1	1	1	$\frac{1}{2}$
	1	1	1	1	$\frac{1}{2}$
	1	1	1	1	$\frac{1}{2}$
$3\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$

$$\begin{aligned} \text{Area} &= 4 \times 3 + 7 \times \frac{1}{2} + \frac{1}{4} = 12 + 3\frac{1}{2} + \frac{1}{4} \\ &= 15\frac{3}{4} \text{ Square units} \end{aligned}$$

7.8

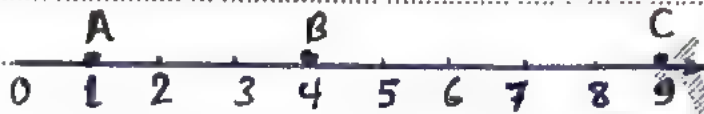
Lesson 6

Introduction to Coordinate planes

① The distance between two points on ray
المسافة بين نقطتين على خط الشعاع

$$AB = B - A$$

$$\text{المسافة} = \text{النقطة} - \text{البداية}$$



$$AB = B - A = 4 - 1 = 3 \text{ units} \quad \text{ويمكن أيضا كتابته}$$

$$BC = C - B = 9 - 4 = 5 \text{ units}$$

$$AC = C - A = 9 - 1 = 8 \text{ units}$$

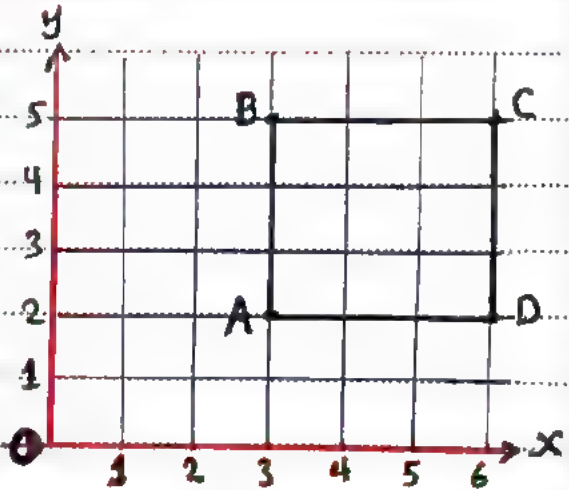
② Locate points on a Coordinate plane

تحديد النقط من مستوى الإحداثيات أو الأماكن

a. Plot the points on the Coordinate plane

$$A(3, 2) \quad B(3, 5)$$

$$C(6, 5) \quad D(6, 2)$$



b. Connect the points in order. What polygon did you create?

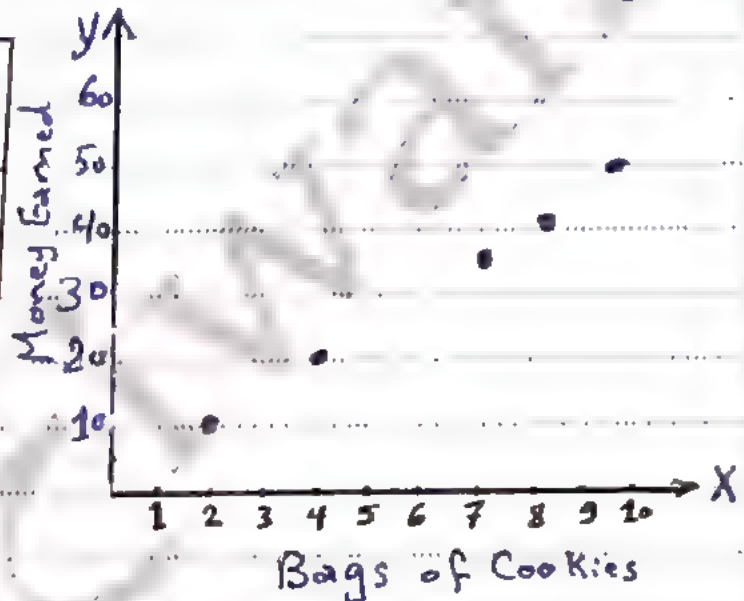
ABCD is a Square



Graphing Real word data

- 1) Ola is selling bags of Cookies to make extra money to buy a new bike. She earns 5 L.E for each bag. Complete table and graph The points on Coordinate grid

Bags	Money L.E
2	10
4	20
7	35
8	40
10	50



L 11 Graphing data of two related Tables

- 2) Yehia and Ali are in 5-hour bike race
Yehia is travelling at rate of 40 km/hr
Ali at a rate 50 km/hr

a. Use information to Complete tables

Y 40 km/hr

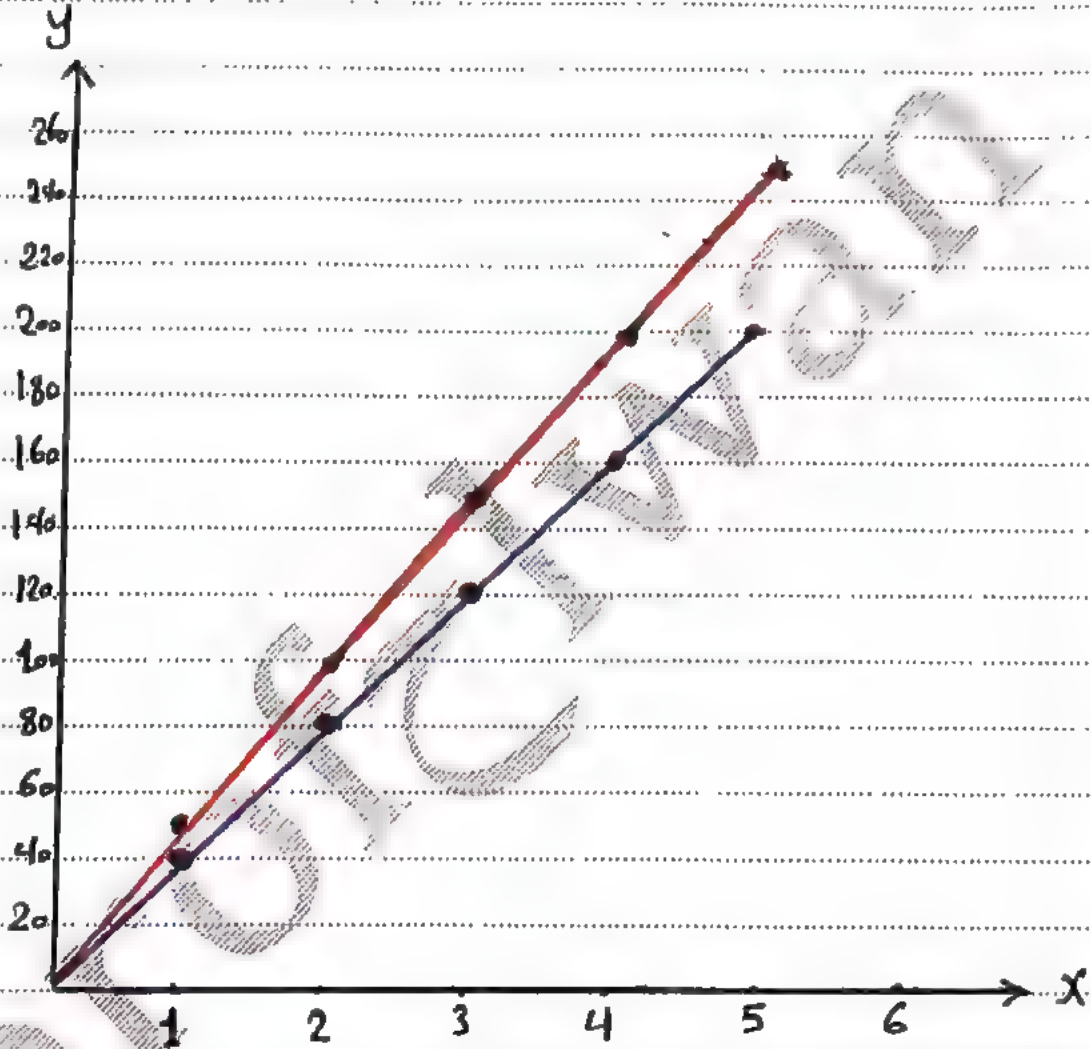
A 50 km/hr

hours	Km
1	40
2	80
3	120
4	160
5	200

hours	Km
1	50
2	100
3	150
4	200
5	250







b.

Graph The data. use different color



خلصت وائسني إن دة
 ييجي في امتحان
 الولد على ما يخلص يكون
 دخل الجامعة

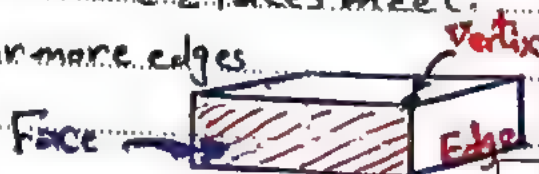
Measuring a new Dimension 3D

3-D Shapes					
Name	picture	Face / base	Edges	vertices	Base
Cube		6	12	8	Square
Cuboid		6	12	8	Rec. Squ.
pyramid		5	8	5	Tri. Sq.
Cylinder		2	0	0	Circle
Cone		1	0	1	Circle
Sphere		0	0	0	No

Face : Flat Surface of Solid figure

Edge : Linesegment formed where 2 Faces meet.

Vertex : point where three or more edges meet.



Who am I ?

- a. I have no edges, no Flat faces and no vertices. (Sphere)
- b. I have 6 Squared faces, 12 edges and 8 vertices. (Cube)
- c. I have Squared base, 5 faces, 8 edges and 5 vertices. (pyramid)
- d. I have 2 Circular base, no edges and no vertices. (Cylinder)
- e. I have One Circular base, one vertex and no edges. (Cone)

Choose

- The peices of cards $\triangle \triangle \triangle \triangle \square$
Can form

A. Cuboid B. Cube C. pyramid D. Cylinder

- In which of the following you can find \square ?

A. Cube B. Sphere C. Rectangular prism
D. Cylinder

Same Value

Different Shapes

Volume = عدد الكعبات في كل طبقة \times عدد الطبقات

1. Complete, where the unit cube is 1 cm^3

a. 1. Number of horizontal layers = 2

2. Number of cubes in each horizontal layer = 12

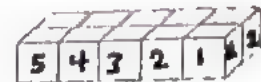
3. Volume = $2 \times 12 = 24 \text{ cm}^3$



b. 1. Number of horizontal layers : 1

2. Number of cubes in each horizontal layer : 10

3. Volume = $1 \times 10 = 10 \text{ cm}^3$



c. 1. Number of vertical slices : 3

2. Number of cubes in each vertical slice : 4

3. Volume = $3 \times 4 = 12 \text{ cm}^3$



d. 1. Number of vertical slices : 6

2. Number of cubes in each vertical slice : 5

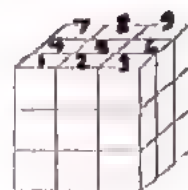
3. Volume = $6 \times 5 = 30 \text{ cm}^3$



e. 1. Number of horizontal layers : 9

2. Number of cubes in each horizontal layer : 3

3. Volume = $9 \times 3 = 27 \text{ cm}^3$



Unit 11

بروف حلوان (50)

Lessons 5, 6, 7

Finding a formula
Using Formula to find Volume

Volume of Cuboid



Magic triangles



V: Volume
h: height

L: Length w: width
B.A: Base area

والى إنت عاوزه جيبه بين

$$V = L \times w \times h$$

$$w = \frac{V}{L \times h}$$

$$L = \frac{V}{w \times h}$$

$$h = \frac{V}{L \times w}$$

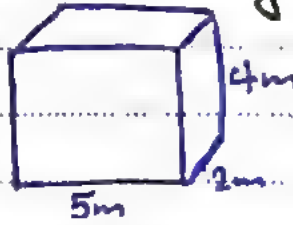
$$V = B.A \times h$$

$$B.A = \frac{V}{h}$$

$$h = \frac{V}{B.A}$$

Examples

1. A what is the volume of rectangular Prism (Cuboid) ?



$$V = L \times w \times h = 5 \times 2 \times 4 = 40 \text{ m}^3$$

B. what is the total volume if you stacked two of these Cuboids one on top of the other ?
لو حطينا اثنين فوق بعض؟

$$V = 5 \times 2 \times 8 = 80 \text{ m}^3$$

2. Radwa Says that more information is needed to find the volume prism.
Do you agree or disagree?

I disagree because
information is enough
to find volume using
Formula $V = B \cdot A \cdot h$

المعلومات كافية



$$V = 20 \times 12 = 240 \text{ cm}^3$$

3. The volume of rectangular prism 630 m^3 .
How you could find the missing dimension?

$$H = \frac{V}{L \times W}$$

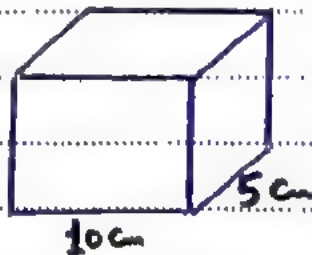
$$H = \frac{630}{15 \times 6} = 7 \text{ cm}$$



4. The volume of rectangular prism is 400 cm^3 .
Adham Says the missing dimension is 350 cm .
Amira Says the missing dimension is 8 cm which
Student is Correct and why?

$$H = \frac{V}{L \times W} = \frac{400}{10 \times 5} = 8 \text{ cm}$$

Amira is Correct.



1. Complete, where the length unit is 1 cm.

a.



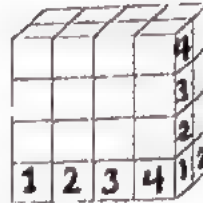
Length: 4 cm

Width: 3 cm

Height: 3 cm

Volume: $4 \times 3 \times 3$ cm^3
 36 cm^3

b.



Length: 4 cm

Width: 2 cm

Height: 4 cm

Volume: $4 \times 2 \times 4$ cm^3
 32 cm^3

c.



Length: 3 cm

Width: 2 cm

Height: 3 cm

Volume: $3 \times 2 \times 3$ cm^3
 18 cm^3

d.



Length: 4 cm

Width: 1 cm

Height: 1 cm

Volume: $4 \times 1 \times 1$ cm^3
 4 cm^3

يلا يا هانم -- يلا يا بيه مش هنمضجع ولا ليه يا

e.



Length: cm

Width: cm

Height: cm

Volume: cm^3

f.



Length: cm

Width: cm

Height: cm

Volume: cm^3

g.



Length: cm

Width: cm

Height: cm

Volume: cm^3

h.



Length: cm

Width: cm

Height: cm

Volume: cm^3

- (1) A juice Case in the Shape of Cuboid its base is Square-shaped of side length 6cm and its height is 15 cm Calculate the volume of it?

$$V = L \times w \times h = 6 \times 6 \times 15 = 540 \text{ cm}^3$$

- (2) A Swimming pool is in the Shape of Cuboid its base is of length 60m and its width 40m Find depth (height) if 36000 m³ of water fill it ^{معه} Completely?

$$L = 60 \text{ m}$$

$$w = 40 \text{ m}$$

$$h = \frac{V}{L \times w} = \frac{36000}{60 \times 40} = 15 \text{ cm}$$

- (3) A builder used 100 bricks for building up a wall. if each brick is in the Shape of Cuboid of dimensions 25, 12 and 6 cm. Calculate the Volume of the wall?

$$\begin{aligned} \text{Volume of one brick} &= 25 \times 12 \times 6 \\ &= 1800 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \text{Volume of The wall} &= 1800 \times 100 \\ &= 180000 \text{ cm}^3 \end{aligned}$$

Introduction to Pie Charts - Understanding Pie Charts Making pie charts

* Pie chart

it is a Circle divided into Slices
Sectors.

* Circular Sector

جزء من دائرة
part of Circular region
is bounded by arc of Circle
and two radii



$$\frac{1}{4} = 0.25$$

$$= \frac{25}{100}$$



$$\frac{1}{2} = 0.5$$

$$= \frac{50}{100}$$



$$\frac{3}{4} = 0.75$$

$$= \frac{75}{100}$$



$$\frac{1}{10} = 0.1$$

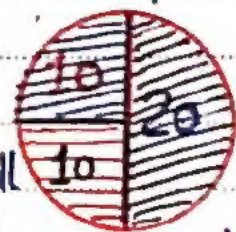
Example: The following pie chart represents
number of Students who practice Sports
Use the data to form Frequency Table

Sport	Foot.b	Basketb	VollyB
Frequency	20	10	10

Football

Basketball

Volleyball



pie chart

then Find Fraction represent any Sport?

$$\text{Football} = \frac{20}{40} = \frac{1}{2} = 0.5 \quad \text{Basketball} = \frac{10}{40} = \frac{1}{4} = 0.25$$

$$\text{Volleyball} = \frac{10}{40} = \frac{1}{4} = 0.25$$

Sport	Foot	Basket	Volly
Fraction	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$

Fractions

Sport	Foot	Basket	Volly
Decimal	0.5	0.25	0.25

Decimals

Another examples:

1. The opposite figure shows the decimals of sales of different types of books. Complete :

a. The sales decimal of French books is 0.2

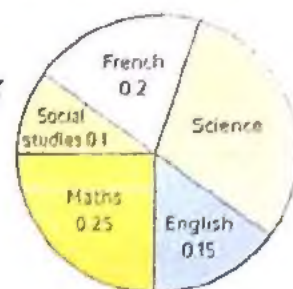
b. The sales decimal of Science books is $(1 - 0.2 - 0.1 - 0.25 - 0.15) = 0.3$

c. The least sales decimal is in Social Studies

d. The ascending order of books types according

to the decimals of sales is: S.S. ,

English , French , Maths and Science



ملفوظة كلبوطة

لو طلب منك Angle يعني الـ
Angle = Fraction \times 360°

2. The opposite figure shows the favorite hobbies for 100 pupils in the fifth primary, study the figure, then answer: $22 + 25 + 18 + 20 + 15 = 100$

a. What is the fraction of the theatre with respect

to all hobbies? $\frac{25}{100} = \frac{1}{4}$

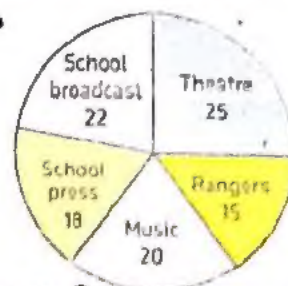
b. What is the fraction of the broadcast with respect

to all hobbies? $\frac{22}{100} = \frac{11}{50}$

c. What is the measure of the central angle of the sector of the music? $\frac{20}{100} \times 360 = 72^\circ$

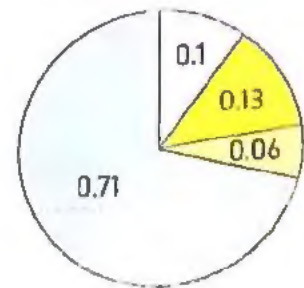
d. What is the hobby, that the least pupils prefer? Rangers

e. What is the hobby that the most pupils prefer? Theatre



3. The opposite figure shows the distribution of the natural components of the earth's surface, study the figure, then complete the following table.

The components of the earth's surface	Water natural supplies	Vallies	Hills	Mountains
The decimal of the forming	0.71	0.13	0.06	0.1

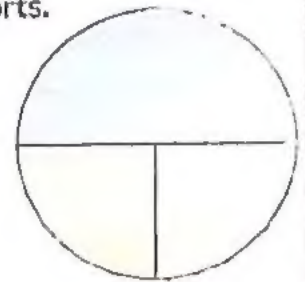


☐ Water
☐ Hills
☐ Vallies
☐ Mountains

- a. What is the component which represents the smallest decimal of the earth's surface? **Hills**
- b. What is the component which represents the greatest decimal of the earth's surface? **water**

4. The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

Sport	Football	Basketball	Volleyball
Number of students	20	10	10



بالحل يا بط

5. When some students were asked about the most popular TV programs, the following data were extracted

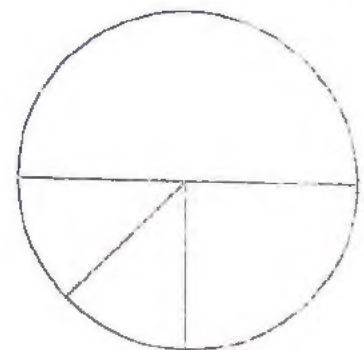
$\frac{1}{2}$ of the students like to watch **Sports** programs.

$\frac{1}{4}$ of the students like to watch **Cultural** programs.

$\frac{1}{8}$ of the students like to watch **Arabic and Foreign movies**.

$\frac{1}{8}$ of the students like to watch **news**.

- a. Represent that given data using the opposite pie chart.

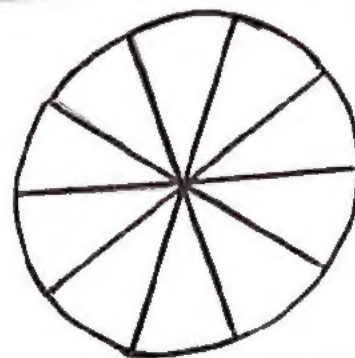


- b. If the number of all students was 48 students, what is the number of students who prefer watching each type of programs?

6. The following table shows the fractions of the number of hours that Marwa studied in different subjects in a week.

Subject	Arabic	Maths	Science	English
Fraction	$\frac{1}{10}$	$\frac{2}{5}$	$\frac{1}{5}$	$\frac{3}{10}$

Represent these data by the opposite pie chart.



7. For each task, select the circular degrees that match the fraction of the circle that is shaded. (A circle has 360 degrees).

a.



- A. 180° B. 45°
C. 60° D. 90°

b.



- A. 180° B. 90°
C. 120° D. 45°

c.



- A. 50° B. 120°
C. 60° D. 30°

d.



- A. 60° B. 270°
C. 150° D. 120°

e.



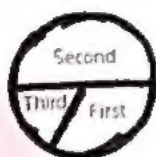
- A. 45° B. 60°
C. 30° D. 90°



8. The following table shows the fractions of chicken production for three farms during October:

The farm	First	Second	Third
The fractions	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$

, then the representation of these data by the pie chart is



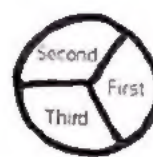
A.



B.



C.



D.

ثم بحمد الله في أول ليلة من رمضان 1444 هـ